The Journal of the American Medical Association

Published Under the Auspices of the Board of Trustees

VOL. LVIII, No. 22 CHICAGO, ILLINOIS JUNE 1, 1912

THE PRACTITIONER, THE PROFESSION AND THE MEDICAL ORGANIZATION *

LAWRENCE W. LITTIG, A.M., M.D., M.R.C.S.
DAVENPORT, IOWA

THE IOWA STATE MEDICAL SOCIETY

The Iowa State Medical Society has reason to congratulate itself on the spirit of good fellowship that has characterized its meetings in the past. I do not believe that there is another medical society in the United States in which the members are less influenced by selfish motives than the society to which you and I have the honor to owe allegiance. In the Iowa State Medical Society, fellow members, we do not know the meaning of the word "politics." We have no factions, no cliques, no ins, and no outs. What is best for the society is the one question ever at issue. So long as this happy state of affairs continues — and I believe that it will continue always — the Iowa State Medical Society is sure to make rapid progress in the fulfilment of its mission.

It has sometimes been said that it is difficult to secure a place on the program of the annual session. Nothing can be further from the truth. I assure you that the program committee and the various chairmen are anxiously looking for the very best men to read papers. If the best men are not secured, it is because they are not known. If any member wishes to read a paper before the society, let him on several occasions discuss the papers of others. If he do this well, he is a marked man, and from that time on it will be impossible for him to keep off the program. It is to be regretted that the scientific program cannot be published at least two months before the meeting, to give ample opportunity for every member to prepare himself thoroughly on several of the subjects that are coming up for discussion. Desirable as this should be, it is not easy to accomplish.

THE HOUSE OF DELEGATES

To confide the business of the society to a small body of men known as the House of Delegates is a wise provision of the plan of reorganization. It is sometimes said that the society is not really a democratic body — that its affairs are managed by a relatively small number of men. There is a little truth in this statement, and it will continue to be true until county societies elect delegates that will attend the session, and that will attend all the meetings of the House of Delegates. Sometimes, at the meeting of the third morning of the session, there is a bare quorum present, and of those present many are in attendance as delegates for the first time. Naturally those that know what should be done, and how to do it, are very apt to point the way. To make the business end of this society truly democratic, to give every county a voice in the business affairs of the society, send as delegates members that will attend the meetings, that will familiarize themselves with the needs and the working methods of the society, and having found such members return them year after year. To be a delegate means work and honor. The member that considers only the honor and shuns the work will never make a good delegate.

I believe it would be a very good plan for all county societies to hold the annual meeting for the election of officers during December. The delegates selected would thus have ample opportunity to familiarize themselves with the needs of the society. The names could be sent to the secretary of the state society early enough so that a correct list of delegates can be printed in an early issue of the *Journal*. There can scarcely be any objection to this plan, and there is certainly much in its favor.

I cannot, however, refrain from making one little suggestion. I believe that the annual session of the state society should be featured in the April number of the *Journal*, and that everything pertaining to that annual session should, so far as possible, be front-page matter.

COUNTY SOCIETIES

The county society occupies a high place in the factors that make for individual and collective progress. In fact, I firmly believe that the work of a county society is a correct index of the professional attainments of its members, and of the character of the service rendered the public. A dead county society is not fulfilling its mission. In order to improve, to keep abreast of the times, medical men must frequently meet in convention, to discuss medical topics. No statement needs less corroboration than this, so evident is its truth. These meetings reciprocally stimulate. It is so often said that physicians should join medical societies and do society work to improve the medical profession. I feel very much like saying that physicians should join societies and do society work to improve themselves. Let the motive be selfish, let it be self-improvement, because whatever improves the individual improves the entire profession, and the quality of the service rendered the public, and hence makes for the public good. I am almost ready to confess that I attend medical societies for selfish motives. I always hear something that sets me thinking, that stimulates me to better effort, that makes me try to be a better doctor. I do not attend meetings with the thought of improving the profession. I am not so conceited as to imagine that my presence is essential to the common good. To imbibe new ideas, to receive inspiration, to enjoy the fellowship of my coworkers — these are my motives.

* President's Address at the Sixty-First Annual Session of the Iowa State Medical Society, Burlington, May 8-10, 1912.

The county society is most important because its meetings are held frequently, and because it gives practically every member an opportunity to take an active part. If the members regularly attend the meetings of the county society, read papers as often as the program committee will permit, and always prepare themselves to discuss the papers presented by others, the meetings are sure to be profitable, not only to the individual, but to the entire professional body. The program committee of the county society should always invite case-reports, carefully prepared and accompanied by a brief review of the up-to-date literature on the subject. Simply to report a case without such careful study is not very profitable either to the member making the report or to the society. The best way to stimulate interest in medical society work is to have interesting and frequent meetings. It is much easier to prepare a program a month or two months in advance, and if the subjects be announced at least one month in advance every member will have an opportunity to prepare himself to take an active part in the discussions. Every member is interested in the meeting in which he takes an active part. He feels that it was a good meeting, just as the old lady insisted that the prayer-meeting was a most excellent one, because she led in prayer. In this state there are several county societies that will serve as models, notably in Ottumwa, Fort Dodge and Lisbon. These societies arrange their meetings months in advance. A little group of men at Lisbon, Linn County, has met every two weeks for the past two years, sometimes with but three (all the doctors in the town) in attendance, sometimes with quite a number of doctors from neighboring towns. The meetings have always been interesting, and they have resulted in much benefit to those that took part. The work of the medical men of the little town of Lisbon may well serve as an example of patient, persistent and successful county society effort. A county society which meets but once or twice a year, or which mails its program one or two days before the meeting, is valueless so far as benefiting members is concerned.

The ideal method of conducting society meetings is that adopted by the Wapello County Society. In this county the program for the entire year is prepared and printed at the beginning of the year, and issued in a neat little pamphlet. I should urge every county secretary in Iowa to write Dr. J. F. Herrick, of Ottumwa (Wapello County), for pointers on county society work. There can be a very good county society wherever four or five doctors can get together once or twice a month. I am not very enthusiastic over members that simply pay their dues but never attend the meetings. I consider them dead, lying high and dry on the bank, and far from the busy stream. Their annual dues are accepted, but they do not stimulate their fellows and are not stimulated by them; they neither give nor receive; they are ciphers in the society and society work. I wish to say here that a county secretary who fails to send a written invitation to each member of the society, immediately after his election, asking when it will be convenient for that member to make his annual scientific contribution to the society, and who further fails to mail the program at least one month before the meeting, is inefficient and incompetent and ought to receive the treatment that the food-fakers planned for Dr. Wiley. The program should be mailed a few days before the meeting, but each program should, in smaller type and less conspicuous display, carry the program of the following month. It is better still to have each program announce the papers to be read the two following months. It stimulates the writer of a paper to have it known that he is under observation; it makes him feel that something is expected of him. This plan gives others ample opportunity to prepare their discussions. I again call attention to the Ottumwa (Wapello County) plan, which is best of all.

It has been said that there are too many district societies — that they detract from the county society and from the state society. I do not share this opinion. I believe that the men who attend the district societies are the most regular in attendance and the best workers in the county society, and most active in the state society. I am most firm in my conviction, however, that membership in the state society should be a necessary qualification for membership in every medical society. I do not believe in the so-called "free-lance" societies. The more good societies the better. Let a doctor get the medical society habit and he is always in attendance at his county, district, state, national and special societies; but of these the county society is most important, because it does or should meet at least once each month.

MEDICAL DEFENSE

For some years the state medical society has defended its members when wrongfully sued for alleged malpractice, and this phase of society work has been taken up in twenty-two other states. It is often said that malpractice suits are secretly encouraged by unprincipled competitors, or by so-called experts for a fee. That this is sometimes true cannot be denied, but I fear that sometimes these suits are due to an uncompromising attitude on the part of the doctor in the presentation of his bill for services. It must not be forgotten that, no matter how just the claim for services rendered, even a successfully defended suit for malpractice is a very expensive procedure in time, money and reputation, and that its cost will more than offset the fee involved. There is no such thing as getting glory out of a suit for malpractice. The doctor, even if the case be taken from the jury, is sure to be blamed by a certain number of people in the community. It involves an unpleasant, distasteful notoriety. Good advice is, do not resort to the courts to collect a fee, if by so doing a malpractice suit may result, unless your management of the case will stand the severest criticism. Do not indirectly invite a suit for malpractice simply to vindicate your position. The medicolegal committee was called on to defend a $15,000 suit; the patient offered to pay $60 and the physician insisted on $75, and here they stuck. This suit cost the society several times the amount of the original bill, and was finally dropped, the physician collecting his fee in full. But I do not believe that he is the gainer by the transaction.

To prevent suits, whenever the case is such that the result at the best may not be satisfactory to the patient, secure early and efficient consultation. If there is a possibility, however remote, that the case may be the cause of trouble in the future, secure still more early and efficient consultation; do not wait until the patient requests you to seek additional advice; suggest consultation yourself even before beginning treatment. All fractures should be seen by a second physician — at best within call — all of them should be *x*-rayed before and after setting, and on discharge. In all fracture cases, the patient should receive specific instructions; nothing should be left to chance. If the patient be asked to report at a certain time, let the record show whether or

V. 58 1912

not he did so. There must be fewer malpractice suits, or the society will have to raise its dues very materially.

The medicolegal committee has never concerned itself with the defense of any member unless said member was unjustly sued, but I think I may say that, in some instances, a little more discretion on the part of the physician, or a consultation, would have avoided the trouble entirely. Do not forget that a successfully defended suit for malpractice is expensive in time, worry and reputation. It is far better to go a long way around to avoid one.

HOSPITALS

Hospitals are increasing in number and should be most important aids in securing the best treatment for many conditions. But too often they are but very poorly equipped for the work undertaken. Too often the visitor is shown a magnificent operating-room, while the all but mythical laboratory is located only with difficulty. *X*-ray work is poorly done, bedside notes are but poorly kept, the instruction to nurses is not systematic or serious, and the pathologist and the bacteriologist are honorary gentlemen, rarely on duty, who make occasional examinations and who, forsooth, do their work in a private office instead of in a well-equipped hospital laboratory. A well-equipped hospital laboratory is absolutely necessary; without it a hospital may be a boarding-house for the sick, but it does not make for progress. Every case entering a hospital must be most carefully studied, before and after operation, ante and post mortem. In the words of Murphy "Let the record show what was done." I consider a careful and complete record most important. This record must contain the clinical diagnosis, the operative findings, the pathologic diagnosis, and a careful bedside record. Such records kept permanently in the hospital and subject to inspection would make for better and more honest work. In many hospitals there is absolutely no systematic attempt at improvement; the hospital board is either too soundly asleep or too actively engaged in intramural hostilities to think of the scientific side of hospital work. Nothing so effectually paralyzes a hospital as a somnolent hospital board, and sleeping-sickness in a hospital board is incurable. In surgical work, too often it is cut and cover; the mistakes are not honest mistakes, such as competent painstaking men make, and which make for progress. Too often hospitals are tainted with the same spirit of commercialism that is so often seen in medical ranks. Too often they are so anxious to fill their beds that they do not inquire into the character and efficiency of the physician who would treat a patient in the house. No policy can be more short-sighted. The reputation and the success of the hospital depends on the character of the work done, and only such physicians should be permitted to work within the walls of a hospital as are able to add to the reputation and standing of the hospital. I believe that there should be a junior and a senior staff, the members of the junior staff to be under supervision until they have demonstrated their fitness to assume critical responsibility. Every legal, honest practitioner should be given the opportunity to demonstrate his ability, but if after reasonable opportunity it becomes evident that he is morally and professionally unqualified, the senior staff should have the authority to deny him further admission to the hospital. I consider this all-important. A man known to be dishonest, or of a judgment so warped that he does a gastrocolostomy as an operation of choice, or who does a hysterectomy on a young woman and proudly exhibits the "specimen," a submucus fibroid which in no manner necessitated a sacrifice of the uterus, or who commits a criminal act inside or outside of the hospital, should be forever barred. I am pleased to report that there are some hospitals in Iowa that bar men like the above. Would there were more!

The operation-room should be open to members of the staff at all times, and all operations should be bulletined. Of course, every attendant witnessing the operation of another is bound by the most rigid obligation to preserve professional secrecy, the same as if the patient were his own. In this way the limited number of operations in a small hospital could be seen by all, and the sum-total of the experience of each member of the staff would be very considerable. On the one hand, camera obscura methods should not obtain in a hospital; on the other hand, professional secrecy must remain inviolate. Interesting cases of all kinds should be studied for the benefit of both patient and staff.

I believe, further, that the day is past when medical men can be both attending physicians and attending surgeons. They should be attending physicians or attending surgeons. So long as practitioners of medicine attempt to cover the entire field, so long will work be poorly done. No man can be a physician and a surgeon.

Let us get over the idea that the surgeon has the larger brain with deeper convolutions. It is true his successes and his failures are more in evidence, but the correct management of an anemic, ill-nourished child, the correct management of a summer diarrhea, the correct management of a case of pneumonia are tasks which even the best should feel proud to have done well; and the man who manages these cases well, who by training and nature is fitted to do them well, is not fitted to do surgery; and, equally, the man who with a few movements of the knife is in the habit of accomplishing much, is not fitted for the patient, persevering work of the internist, although he must be a good diagnostician. I believe that the movement to standardize all hospitals should be encouraged by all means possible. Minnesota has taken the lead, and a nation-wide movement is being considered by the Council on Medical Education of the American Medical Association. I believe that the hospitals of Iowa will welcome this movement. A hospital is a public utility; the public is vitally interested, and has a right to know that it is well managed. All hospitals should be placed under searching and rigid state or national supervision. Standard hospitals would be available as clinical schools for the instruction of fifth-year students. What an immense impetus to better endeavor! The public would soon recognize the difference between a standard hospital and one that is not standard, patients would seek the former and avoid the latter. Let us have well-managed standardized hospitals, where team work is done, where specialists are developed, where only high-grade men are admitted, and where the incompetent and the dishonest are barred. Let hospitals become each a medical school where there are equal privileges for all honest, earnest, reasonably competent men. But, I repeat it, to work in a hospital must be considered a privilege, a badge of honor, and the unworthy should not enter. Who shall decide the question of fitness? If the work of a man will not bear the light of day, if his work is not open to inspection by his colleagues, if the record — an honest record — does not show what he has done, let him be barred.

I wish to make a plea for a trained resident pathologist, roentgenologist, and anesthetist in hospitals. It

is becoming the correct thing to have the anesthetic given by trained women. Such a woman, resident in the hospital, could give anesthetics, act as pathologist, do *x*-ray work, etc. There is ample work about a hospital of very moderate size to keep such a trained woman quite busy, to the great advantage of every member of the staff. A pathologic report in every case would stimulate to better effort and make for better doctors.

COMMERCIALISM IN MEDICINE

This word, "commercialism," has a harsh and rasping sound, but it will not down, although its discussion usually makes for progress, as the crab progresses. Books have been written on it; there have been biting magazine articles without number (notably by Arno Dosch, Ex-President Reed of the American Medical Association, both in *Pearson's*) many articles in medical journals, and numberless addresses by medical men before medical bodies. The remedy for existing conditions has been sought in publicity; dire laws to control it have been threatened, unless the medical profession eradicated the evil: "Purify yourself from within or you will be purified from without, and to your sorrow." The result has been more and more commercialism, until the public thoroughly distrusts the medical profession, a distrust on which arrogant quackery has fattened as never before. What good does it do to talk about these things? But the subject will not down, until the medical profession mends its ways, and public confidence is restored, too much has been said and written to "put on the lid" now. I shall not enumerate the various symptoms of this disease, commercialism, as manifested in the body professional. This is a commercial age, and it is little wonder that the medical profession has not escaped. In truth, to have escaped infection entirely would mean that medical men and women are made up of much sterner and purer stuff than other men and women. "Put money enough in thy purse" is the almost universal slogan.

In defense of commercialism in medicine, it has been said that medicine is a business, and business methods should prevail. A business man has something to sell, and he sells to all that he can induce to buy, his only concern being the ability of the would-be purchaser to pay, and his own profit on the transaction. It is not for him to inquire whether the would-be purchaser needs the article offered, or whether its acquisition will add to his happiness or comfort. Imagine a physician or a surgeon influenced by the same considerations, "ability to pay and the profit on the transaction." How often have you that are not tradesmen, members of this society — how often have you refused to sell your commodity in spite of the fact that the consumer had a good financial rating, and the profits of the transaction were within your grasp? How often have you refused to give unnecessary medicine? How often have you declined to do unnecessary operations? How often have you sought your reward not in "honesty is the best policy" but in the feeling that you were doing right, regardless of the most profitable policy? No, we are not tradesmen; the practice of medicine is not a business except to the charlatan and the quack. What sort of business man would unceasingly labor to destroy his market and curtail his sales, as does the physician who tries to prevent disease and the spread of infection? But I fear that there may be physicians who are tradesmen — who barter, who sell their wares to all that are willing to buy — to whom a patient is only a possible source of so much profit, as much as "the traffic will bear." I do not believe that any such are attending members of this society. The relation between physician and patient is not that of buyer and seller; it is unique, unlike that of anything else on earth. As was recently said in an address to medical men, "You are the prosecuting attorney; you are the counsel for the defense; you are the judge, you are the jury; and you are sometimes the executioner." And I shall add: "You conduct your case behind closed doors, in camera obscura, with no witness but your own sense of right and wrong." And this profession of ours is a business, subject to business methods (!) I tell you it is a vocation calling for the highest ideals and for the most unselfish standards of honesty and purity of purpose. No, we are not tradesmen, you and I. But if it be true "that those that preach the Gospel shall live by the Gospel," it must be fitting that those that practice medicine should live by their labors. Business methods in making collections do not make our profession a business; and here a business spirit, a tempered business spirit, should prevail.

COMMERCIAL MEDICAL SCHOOLS

But the struggle for existence goes relentlessly on, and the spirit of commercialism is the result of an inexorable law. As the struggle for a livelihood becomes more intense, men are less concerned about methods, provided the desired end be obtained. No fact is better known in the business world than that competition may be so acute as to be ruinous to the competitor, and give a very inferior article to the consumer. Worse still, the material rewards may be so meager that the better class of young men will not be attracted to the profession. What can be done to remedy this evil? Before a remedy can be suggested for this condition, something must be known of its source — of the factors which brought it about, and which give it root. Back of all and responsible for all is a condition from which there is no immediate escape. There are too many medical schools — too many commercial medical schools — and consequently too many doctors, and especially too many that are graduates of commercial schools. The remedy that suggests itself, first of all, is to lessen the number of medical schools, and to eliminate all of the commercial schools. There is no other possible solution. Yellow fever was throttled by destroying the breeding-places of the mosquito by screening the rain-water, oiling the ponds, and draining the swamp-land. In like manner must the breeding-places of the incompetent doctors be sought out and made impossible. All the commercial medical schools must go; all the struggling medical schools must go; medical schools harboring commercial teachers must purge their faculties or forfeit the support of the profession. Commercial teachers in medical faculties are doing and have done more to commercialize the profession — and I use commercialize in the worst possible sense — than all other factors combined. With these men prostituting their positions for the most selfish of ends, improvement is impossible. The struggling and honest school may deserve sympathy and the *coup de grâce* should be given it as considerately as possible, but it must be *coup de grâce*. If for any reason a school does not promise the best results, it must go. Let the good and the poor schools be advertised for just what they are; let prospective students know which schools are good and which are bad. Students must learn more about work in medical colleges. They must learn that it is an easy matter to keep them busy in

V. 58
1912

almost any kind of a medical school — to keep them "hustling," that they may have no time to compare notes. Naturally, the ambitious, industrious student feels that his time is profitably spent if he is busy. He is not a judge of the quality and food value of the viands set before him; he often gets very little wheat in much chaff, so that he is kept very busy getting enough protein to keep growing; his stomach is taxed to the utmost, but the food value of the repast is very low; his real advance is but a fraction of what it should be in the four or five years of his course. If the best schools be selected — and this would be done if the best schools were known to those entering — much would be done to solve the problems now confronting us. Physicians should advise young men to select only the better schools — should help them select the better schools.

MEDICAL EXAMINING BOARDS

The state board of medical examiners, a national board, or a board for a group of states, must insist on more rigid examinations of schools and of applicants for license. It may be necessary to improve the quality of the board. In fact, I think it is most advisable to do this by asking the state medical society to suggest two or three names for each vacancy on the board, the governor to make the final selection. There should be no bar to reappointment on the board, because really good men are very few. Boards must carefully acquaint themselves with the work actually done in medical schools. Let them carefully inspect the schools, actually know whether that old worthless gynecologic clinic is still given, whether that "favorite pastime of former medical students" the omnibus, spectacular, surgical clinic, worthless except for diagnostic purposes, is still in vogue, or whether individual painstaking instruction is being given to small groups of students. Let the state board know that clinical material is ample and that selected cases may be available for demonstration when needed. When the candidate reports that he has attended five cases of confinement, let the board know whether the five cases sufficed for 100 students seated on benches, or whether each student individually attended five cases; let the board know whether one hour by the teacher means one hour for 100 students taken collectively, or whether it means one hour for a small group of five students. The board must take nothing for granted; let it actually and seriously investigate, and know that candidates have had serious, individual, not omnibus training. Two years in college as an entrance requirement may mean something or it may be a blind; the actual work in the medical course is more important than the entrance requirements.

PRACTICAL EXAMINATIONS

Let the board give a practical as well as a theoretical examination. The present examinations are not a test. A man may answer ten questions on almost any subject, with the aid of quiz-masters or quiz-manuals, and still be utterly incompetent to practice medicine, wofully ignorant of medicine. It is a very poor school indeed that cannot prepare its graduates to pass examinations as at present conducted. It is said that years ago a certain medical school in the South, with a one-year course, had more men in the Army and Navy than any other half-dozen medical schools. The graduates were prepared to pass examinations. That school is now a four-year school, but I question whether its recent graduates are better able to answer questions than were the graduates of years ago, although they are infinitely better prepared to practice medicine — infinitely better doctors. The work of the state board will be very easy in those states which have no medical schools within their border. In such states both the theoretical and the practical examinations can be made very severe, the number of physicians gradually lessened, and the service to the public immensely benefited. Such a state should be especially fortunate; it should have the best medical service, other states bearing the heavy cost of educating its medical men. There would be no local interests to consider.

In states which have within their border weak and struggling medical schools, the profession has confronting it an unusually difficult problem, since the examinations are sure to be tempered to meet the ability of the home school. Deplorable indeed is the condition in a state in which there are many commercial schools of the lowest type and in which the state board is controlled wholly or in part by these schools. This condition seems to exist in one great commonwealth, and it is a satisfaction to know that the Iowa State Board and other state boards have established a quarantine against that state; it was time. The odor was smelling to heaven, and it will take a generation to remove the blight.

With fewer and better schools, better examinations, with at least one year of hospital training, there will be fewer and better doctors, and the medical profession will attract better men. This much attained, professional fees must be equalized. Who will maintain that the correct management of a case of pneumonia, typhoid fever, or summer complaint in a child requires less skill and thought than an ordinary laparotomy? Is the fee adequate for the services in these cases? Fees for the trying house-to-house service, be it in the country or in the city, are too low. Do you wonder that so many medical men are attracted by the larger fees of the operator? The well-trained, experienced surgeon who makes careful diagnoses, who is competent to meet emergencies, who does every operation in the best possible manner, who is conscientious and God-fearing, who declines to do unnecessary operations, who does enough but not too much — that man earns his fee whatever it may be. We are attracted by the things that seem easy; we neglect the things really difficult, as the correct diagnosis, and the correct management of daily internal cases. And why? It is the fee that is attractive. With fewer and better doctors, with fees proportional to the skill and the judgment and the responsibility involved, conditions will be immensely improved.

Can anything else be done to improve conditions? That question has been answered many times — by Ex-President Reed of the American Medical Association, by Ex-President Lord of the Western Surgical Association, by President Murphy of the American Medical Association, and by many others; the remedy is included in the single word "publicity." Let the people know that at least 25 per cent. of the men practicing medicine are graduates of commercial schools, and entirely incompetent to assume responsibility of any kind, be it teething baby or a case of roundworms. There are men who are equally incompetent, although graduates of schools considered good at the time of their graduation. I refer to the men who have not visited medical centers during the past ten or fifteen years, who do not read journals, and whose diagnoses and operations beggar description.

The "amateur surgeon" has been flayed without mercy, and he deserves all he is getting, but he is not

so much to blame as the school which failed to impress him with the sacredness of his obligations, and the state examining board that gave him his diploma and his license to assume every responsibility. The word "amateur" does not consider the age of the surgeon, or the years of his practice. The man who does not often feel that his knowledge of surgery is very incomplete and who does not persistently seek the truth, the man who does not make every effort to reach a reasonably correct diagnosis in every case is an amateur, and should be so heralded to the public. The man who attempts the management of a difficult surgical case — and all laparctomies are difficult — without a reasonable experience as assistant, is dangerous, and should be so heralded to the public. The specialist who does not have a sufficiently broad knowledge of medicine to estimate symptoms with a fair degree of correctness, and who uses a microscope of a power so high that he sees only a very limited field, is an amateur, and should be so heralded to the public. The man who does not use his microscope to make or confirm diagnoses whenever possible is an amateur and will always remain an amateur surgeon. I have several young friends who do not subscribe for THE JOURNAL of the American Medical Association, and I am afraid they will always remain amateurs. The man who does not often think that his work is far from perfect, who is not a severe critic of himself and his methods, and who considers himself as good as the best — is an amateur. I believe that the really competent and able man sometimes, often, experiences the feeling ascribed by Osler to the mystic in his "Alabama Student." "They see the travail of their souls and are not satisfied, and in the bitterness of the thought that they are not better than their fathers are ready with Elijah to lie down and die." Not a comforting sentiment, but it comes with force to the men that are striving for better things: the amateur never has this feeling. Good internists are as scarce as good surgeons; they should command just as good fees, and internal cases are often more difficult; although a fatality does not rest as heavily on the shoulders of the internist, yet the responsibility is the same. The man of any age who loses a pneumonia or typhoid patient without consultation is just as reprehensible as the man who loses a patient in what should have been a simple and safe surgical operation.

The demand for better service is just as urgent in medicine as in surgery. I believe that the honest, conscientious, painstaking doctor will soon come into his own, be he internist or surgeon.

The remedy for commercialism is fewer and better medical schools, with the immediate and complete elimination of commercial teachers from all schools, a fifth hospital year, fewer and better doctors, less drugging and more teaching, equalization of fees, and publicity. Let Arno Dosch, Lord, Murphy, Reed and others continue their agitation until the public is taught to "stop, look, and listen." If the medical profession will not purify itself from within, let it be purified from without.

THE PUBLIC AND THE PHYSICIAN

I have said that the public pretty thoroughly distrusts the physician and not without reason. The loud and continuous hammering the profession is receiving because of its commercial tendencies and because of the large percentage of entirely incompetent men within its ranks in a measure explains this distrust. Only a few days ago one of the foremost scientists in the country said to me, "What benefit can come from a consultation? Doctors always support each other; the patient is no wiser. Consultations are merely a matter of form." This statement was made by an educated observing man. Does it indicate that he has a great confidence in the integrity of the profession? Is there any basis for his suspicions?

I often think that the number of quacks in a community is a measure of the manner in which the profession has met its obligations. I recently asked a well-known practitioner whether he gave his patients sensible advice, whether he instructed them in medical matters. "Sensible advice — instruction — no. They want treatment, and I treat them." This sentiment put into practice is sure to work to the advantage of quacks and quackery. An intelligent community, intelligent in medical matters, is not a good field for quacks. Every physician should become the teacher of his patients. The public must be educated, and doctors must be the teachers, at the bedside, in the consulting-room, always telling the truth about medical matters. If every doctor would do something in this line, if only a little, the sum-total would be a stunning blow for dishonest and illegal practitioners.

Says Benjamin Moore, in "The Dawn of the Health Age" along these lines, "The medical profession sadly requires to have some dignity put back into it, by being made a truly teaching profession. Medicine must be given sometimes, but at the same time if doctors could see their way to give one-tenth the present amount of drugging and ten times the present amount of teaching, it would be better for both the world at large and the self-respect of the medical profession." Less drugging and more teaching is a slogan by which to win.

THE STATE EXAMINATIONS

The medical profession has no quarrel with any real or so-called school of medicine; it favors and recognizes no special school but welcomes to its ranks every educated physician; and wishes a full measure of success to every man that practices the healing art. But the medical profession and this society stand for equal tests for all in the basic principles of medicine. No treatment according to any school is possible unless a diagnosis be made, without which the grossest and even criminal errors are unavoidable. On this point there can be no question. Hence the state examination must include all the subjects usually taught in a medical school, except therapeutics and materia medica, which may well be left to the schools. There should be no examination in "practice" but a searching examination in "internal and nervous diseases." The examination must include the causes, the pathology, and the symptoms of all internal diseases, and all the so-called fundamental branches, all of them, that a diagnosis may be possible. It is no concern of the state board of medical examiners whether an applicant be a so-called regular, homeopath, eclectic, or what not, so long as he is well trained in pathology, pathogenesis, etc. Clean, competent, honest stimulating competition is welcomed. Let us hope that the time is not far distant when a national board of examiners will take charge of all examination, and issue all licenses to practice medicine. Perhaps a board representing a group of states would be more practical, as suggested by Mr. Hallett of the Royal College of Surgeons, at the recent conference in Chicago.

V. 58
1912

DR. WILEY AND THE OWEN BILL

You all remember the unworthy effort to force this faithful public servant from his important position. Feeling that by so doing, I should reflect the sentiment of this society, I sent a message to President Taft that the 2,000 members of the Iowa State Medical Society endorse and believe in Dr. Wiley because of the great work he has done and is doing. A very courteous reply came from the White House, but of course under the signature of the President's secretary. But Dr. Wiley has resigned. I have so much confidence in his judgment that I feel that he is working for better things, that he sees better and bigger things in the not far distant future, a national Bureau of Health. About this just a word. I need not dwell on the urgent need for such a bureau, or on the work done by the League for Medical Freedom to prevent its organization; but "who," says Earl Mayo, " are the chief opponents of the establishment of a national Bureau of Health and who oppose all supervision in health and medical matters, state or national?" "What other interest," says Mayo, in referring to the patent medicine interest, "has the ability, even if it had the disposition, to raise hundreds of thousands of dollars for a continuous campaign against the proposed national Bureau of Health, all in the guise of medical freedom?" "Freedom," says Mayo, "to poison, to debauch and to slay, and such opposition should bring to Senator Owen the support of every decent citizen." Much has already been done to voice the sentiment of the profession and of the people on these matters, but much remains to be done. A direct and forceful appeal must be made to the broad-minded men that represent the state of Iowa at Washington. I should suggest not only that the House of Delegates send a suitable message to Senators Owen, Cummins and Kenyon, but also that every member of this society communicate with his respective representatives in Washington, asking for early and favorable action on the Owen bill, known as Calendar Bill 561. These letters must be written at once. In addition, every member should induce as many influential citizens as possible to write similar letters. The Owen bill would become a law very soon if the members of the medical profession were half as busy as the National League for Medical Freedom. We must not be caught napping; we are responsible for the attitude of Iowa in this matter and now is the time for action.

The Owen bill has recently been reported favorably by the Senate Committee; this is reason not only for encouragement, but also for additional effort. Everybody must get busy and boost. Write letters to the Iowa senators and representatives — many letters, and at once.

A CRYING NEED AND AN OPPORTUNITY

We owe much to Rochester and much to the leading surgeons of Chicago and other great cities. They have thought of us, and prepared for us an annual congress of surgeons, and other like entertainment. We can go to a large city at any time and see noted men at surgical work — always technic, until we forget everything else. What we need most of all and what we want is not operations, not technic, but pathology and diagnoses, medicine and medical clinics. We need and we want careful clinical methods, we want diagnostic methods, we want to refresh and rejuvenate ourselves by again seeing and hearing Pepper, Charcot, Nothnagle, Gerhard, Bramwell, Gowers, Krafft-Ebing and Dejerine. We must be brought to a higher estimation of things medical. We want to get acquainted with the internists and neurologists, with Billings, Sippy and Dock; with Patrick, Church and Hecht. We want to see these giants in action, we want to observe and study their methods. These are the men that can stand on the bridge, that have it in their power to stay the surgical onslaught, and to entice younger men and older men, too, back into medicine. Let Chicago arrange a medical clinic for senior students and doctors, three or four hours each week-day; let the time and the place be widely heralded in different hospitals, on different days; let the keynote be diagnosis and clinical methods. These clinics would soon be as well known as are the surgical clinics, and they would soon become veritable medical meccas. A surgical congress makes for more surgeons, and I hope that it makes for better surgeons, that it stimulates serious study of surgical problems, and that it makes for better diagnosticians and better surgical pathologists. But it is an omnibus, spectacular, opera-glass affair. I sometimes fear that it fosters the idea that surgery is easy and profitable.

In addition to the daily clinics already mentioned, a medical congress conducted much as the surgical congress is conducted would stimulate the often waning spirits of the internists, and every general practitioner is an internist. Such a congress would divide honors with the surgical congress, or perhaps rank higher as a factor making for progress, and do more good. I would not have this an idle appeal; many, many times have I longed for medical clinics. There are more than enough internists in Chicago and other large cities to accomplish wonders in this direction without undue hardship to anyone.

The surgeons are doing all the shouting, while the internists bewail the lack of appreciation for their work. The remedy is easy. We need diagnostic methods; we must improve ourselves; we must again be taught how to examine patients, how to read and estimate correctly. These must be clinics that set men thinking — that inspire correct methods; the benefits will be immense. Will our appeal be heard by the men that have it in their power to teach us better methods and higher ideals? I hope so. We appeal to the metropolitan internists to inaugurate a series of medical clinics and a medical congress. They will be successful. Many of you know how attractive the clinics of Nothnagel, Charcot, Mendel, Krafft-Ebing, and the others mentioned were to medical men. Chicago and St. Louis can duplicate these clinics. Will they heed the call?

THE MEN OF THE HOUR

In closing, I should say that the need and the hope of the profession is young men, earnest, well-trained young men, men of high ideals, but in this work of ours there is but one test for age. The man who reads, who studies, who does not let a day pass without an effort to make himself a better doctor, who attends his county and state societies, who frequently visits medical centers, who prepares papers for his county and other societies — that man is a young man, and in him lies the hope of the profession. The man who isolates himself from his coworkers, who works alone, who feels that attendance at medical meetings is time wasted, and that nothing is to be learned at medical centers — he is an old man regardless of the date of his birth. The man that is ready to write a paper when invited to do so is a young man. Recently I spent a day with one of the leading surgeons of our sister state to the eastward. Casually, he said that he had in mind twelve subjects on which

he wished to read papers. His papers are much sought and always good. That man will never grow old. What an example he should be to some of our old men that graduated during the first ten years of the present century, who are too busy to prepare papers, or who do not regard an invitation to read a paper as a precious compliment, calling for their best effort! I know a large number of men who began to age the day they graduated, who have grown older and older ever since, and who are now bent and decrepit in medicine, although they have not yet reached the age of 40. I know men of 65 or 70 years who are active workers, with most receptive minds, and these men are still young, and we love them for their youth. The need of the hour is men who love medicine for its own sake, who are enthusiastic, tireless students, clean men, honest men, men that are brave enough to say "I do not understand your case," men who strive to make a diagnosis rather than blindly prescribe, men who are painstaking, progressive, receptive, sympathetic, big-hearted, warm-blooded men: God-fearing men, men who never forget that all their training, all their effort has for its object only the best interests of the patient to which every other consideration is secondary. These are the young men so sorely needed; they will never grow old; and "men" all through this paper includes men and women. The grandest young man in Iowa to-day — we all love him — is Edward Hornibrook, of Cherokee.

I wish to say that I believe that there are hundreds and hundreds of men practicing in Iowa, the larger percentage of them country doctors, who in a progressive spirit and in devotion to duty excel their city confrères. There are in Iowa to-day hundreds and hundreds of country doctors who are fully competent and who merit the sympathy and warm affection so freely given to that "good old country doctor."

My faith in the future of the profession is unbounded; the future is bright with promise. We shall weather all our storms; commercialism will disappear; the public will be more intelligent and responsive; hospitals will bar their doors to the unworthy; the commercial schools will be throttled; and the material rewards will be sufficient to attract the very best men. The profession will continue worthy of its great inheritance, of the inheritance left it by Lister, McDowell, Laennec, Jenner, Hunter, Harvey, Koch, Pasteur and Ross, a few of the immortals that grace our guild. It will be a better and a purer profession, a fit profession for your son and for mine.

Serotherapy in Itching Skin Diseases.—Linser does not attempt to explain its mechanism, but he states that there can be no doubt of its efficiency. He injects 10 or 20 c.c. of serum from a healthy person and has found it effectual in arresting the tendency to general pruritus in the elderly, also in impetigo, urticaria and allied dermatoses in children and in eczema. In the latter affection it is supplemented by the usual measures, but in the pruritus of the elderly nothing else is needed in some cases, the pruritus ceasing entirely after a few injections of the serum. He usually makes three or five injections on successive days and then waits to observe the effect. Some patients had up to sixty injections on consecutive days with no by-effects. It is indispensable, he has found, to have the serum from a person of the same sex and the same condition as to presence or absence of pregnancy. There can be no question of anaphylaxis, as the serum is not from an alien source, and he urges a trial of the measure in all rebellious cases. Linser is professor of internal medicine at the University of Tübingen, and his article on the subject is published in the *Dermatologische Wochenschrift*, March 30, 1912.

CONTRIBUTION TO THE SURGERY OF BONES, JOINTS AND TENDONS

JOHN B. MURPHY, A.M., M.D., LL.D.
President of the American Medical Association
CHICAGO

(Concluded from page 1331)

EXTRA-ARTICULAR LESIONS PRODUCING DEFORMITIES OF JOINTS

The extra-articular lesions which are operative in producing deformities of joints are (a) shortening of tendons through contraction of muscles; (b) paralysis of counteracting groups of muscles; (c) cicatricial fixation or shortening of the capsule, and (d) cicatricial contraction of the skin and fascia. These are caused (1) through burns, sloughs, trauma, and so forth, and (2) by periarticular abscesses, such as a psoas abscess in the hip, popliteal abscess, and so forth.

Muscular contraction from trauma is most commonly the sequence of too tight bandaging. This is particularly noticeable in the lesion described in the literature as Volkmann's contracture, Volkmann's paralysis, ischemic paralysis and ischemic muscular atrophy with paralysis. I shall not go into the literature of this subject now, as that would require too much space, but it will be considered fully in a monograph to be published later. None of these names, however, expresses the real pathologic condition, which is a traumatic myositis, the result of pressure produced by a circular bandage or splint applied too firmly against the muscles of the arm or forearm. Following such pressure there is an immediate myositis with absorption and subsequent contraction. All of the damage is done practically inside of the first seventy-two hours. The contraction shows itself in from four to six weeks, and assumes a fixed condition within ten to twelve weeks. It then remains stationary except for the additional deformity which is produced by the growth of bone without a growth of muscle. This makes it appear as though the muscles were continuing to contract, which is not my view of the case.

There is no paralysis of the motor nerves from the ischemia, except when a splint presses against a nerve, the median, axillary or ulnar. If one examines these patients carefully at the end of six or eight weeks, one finds that all of the muscles respond to voluntary impulses; that the motion in them is limited by the fact that a greater or lesser portion of the belly of the muscle has been destroyed by the myositis and is now a firm cicatricial mass, often readily recognizable by a depression in the forearm or over the biceps or triceps.

When a bandage is applied too tightly around the knee, the external popliteal nerve is readily compressed as it passes over the outer surface of the fibula just below the head. This results not in a contraction, as it does everywhere else in the body, but in a paralysis and elongation of the muscle which in the lower extremity is recognized as a drop-foot. It is a common sequence of a prolonged Buck's extension or a plaster cast applied firmly around the knee, or of compression in splints. It results in a paralysis of all the extensor group of muscles on the anterior surface of the leg, and later a contraction of the calf muscles follows, giving the patient a talipes equinus. The drop-foot so commonly present after fractures of the leg and thigh is a dressing sequence and not an injury sequence.

Occasionally in traumas to the arm, forearm, thigh and leg, the muscle bellies are cut through to the bone

V. 58
1912

and extensive hemorrhage into them takes place, and the muscles become adherent or united to the periosteum, which fixes and immobilizes the muscle so that voluntary contraction or extension cannot be produced below the point of muscular fixation. Absorption of the adipose tissue may follow this contraction and the skin is frequently attached directly to the aponeurosis or belly of the muscle. A myositis ossificans, when it extends into the muscle for a considerable distance, not infrequently produces a contraction and a limitation of motion. Inter- and intramuscular angiomata, the result of trauma or infection, may cause a phlebitis, which in turn causes a deposit throughout the muscle or muscle group of an extremity, resulting in contraction and fixation, with permanent deformity.

I shall not consider here the spastic contractions from central nerve lesions nor the hypercontraction due to paralyses of opposing muscle groups. I shall, however, consider the congenital contractures and deformities of muscle origin.

TENDON SUBSTITUTIONS, ELONGATIONS AND TRANSPLANTATIONS

It can be seen from the above classification that all of these propositions must be met by a type of treatment adapted to the etiologic factors and the physical conditions in a particular case. A bandage that has been so tightly applied following an injury as to cause a rapid edema of the extremity below the point of injury or to cause sufficient pain to require an anodyne should be removed at once. At once means *immediately*, not in a few hours or in a few days. One must bear in mind that the pressure can destroy the muscle, as demonstrated experimentally, as early as three hours following the application of the bandage, and twenty-four to forty-eight hours is ample time in which to disable a member permanently.

Bandages and splints should never be applied for the purpose of reducing a fracture, and rarely ever for the maintenance of position by force after reduction. They are simply immobilizers or means for limiting voluntary or mechanical disturbance of the bones after reduction is effected. I have had under my care in the last three years sixteen cases of this type, involving the upper extremity, which shows how common the lesion is. In not one of these was there a paralysis of sensation or motion, showing that the nerves were properly functionating. The limitation of motion was due to the contraction of the muscle following the pressure myositis.

The principles of treatment consist (a) in the correction of the deformity; (b) in balancing the muscle groups so that subsequent contraction and deformity do not occur; (c) in the division of such portion of the joint-capsule as is necessary to permit of a full latitude of motion in the joint.

The first is accomplished by the elongation of the flexor tendons by means of a double L incision and division, as shown in Figure 126. The tendon should be elongated so as to leave a slack at the time of primary correction. If possible, parallel tendons should not be divided on the same line. Each tendon should have its sutures inserted at the time of division, but not tied. In the profundus-sublimis-pollicis group at the wrist the degree of elongation can be estimated by straightening the fingers and extending the wrist to the fullest extent after division and before approximation.

The flexor carpi radialis and ulnaris do not need to be elongated more than ½ to ¾ of an inch in any of the cases, while the index- and middle-fingers may need an elongation of 2½ to 3 inches. When the tendons have all been elongated and sutured, if the hand still does not remain in position, the capsule of the joint should be divided all along the anterior surface of the joint and the line of division covered by a flap of tissue taken from the side of the wrist. When this cannot be accomplished, the point of union or approximation should be surrounded by egg membrane to prevent tendon agglutination. When the sutures are tied and the tendons replaced, a portion of the tendon sheaths or the fascia and fat from the inner or outer side of the arm should be swung in between the tendon groups and sutured, otherwise the tendons become fixed to each other transversely and the muscles move as a group in place of individually. The effect of this plan is beautifully illustrated in Case 33.

CASE 33.—*Patient.*—R. K., type distributor, aged 19, suffered from contraction of flexor tendons of forearm and of biceps, and of fascia in upper arm and elbow. Personal and family histories were negative.

Present Trouble.—In September, 1899, the patient was thrown from an unmanageable horse, sustaining a fracture of the left arm near the elbow. The arm was placed in a plaster mold for six weeks, with the forearm fixed at a right angle. During this time he had great pain in the forearm, with enormous swelling of the hand and fingers. When the mold was finally removed, the elbow was flexed with only 1 inch of flexion and extension at the lower end of the radius. The wrist was flexed and contracted on the forearm, and the fingers contracted on the palm. Sensation over the hand was gone. The patient says that the elbow was operated on in January, 1900, and a small piece of bone removed. The arm was then completely and forcibly flexed and placed in a mold. When this mold was removed he could extend the arm a little more than to a right angle, and flex it to the shoulder; some power in the fingers was regained; sensation over the whole length of the arm and hand returned.

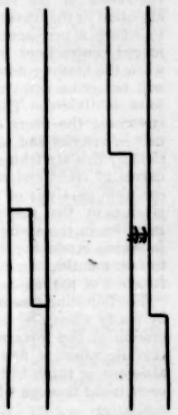


Fig. 126.—Method of tendon elongation. Double "L" incision and approximation by suture of long ends of two "Ls."

Examination.—There was great atrophy of the muscles of the forearm and lower third of the arm. All the flexor tendons responded to voluntary contraction impulses, showing that the nerves had not been destroyed, and that it was a tendon, muscle and capsular fixation, and not a loss of neuron transmission. The degree of motion diminished until the patient had just sufficient motion to determine that it was not a bony ankylosis.

Treatment.—In June, 1900, the biceps tendon was exposed and elongated for an inch and a half. It was then found that the arm could be extended only half an inch more than it could before and that the obstruction to elongation was not the biceps tendon, but the capsule. An incision was then made over the internal condyle for a distance of 2 inches, extending upward on the supracondyloid ridge. A similar incision was made over the external condyle. All of the tissues, except the capsule of the joint, were elevated with a periosteotome, but the periosteum itself was not disturbed. One could then look across the forearm, from one condyle to the other, and survey the entire capsule of the joint. This capsule was divided with a tenotome, the edge directed toward the joint. After its complete section the forearm dropped

down and was then easily extended to the full anatomic range. Primary healing followed and within two weeks he was able to make flexion and extension of his forearm without any evidence of previous conditions. Four weeks following this all of the flexor tendons of the forearm were elongated, according to the usual double L elongation plan, and with lateral approximation stitches union was secured. The degree of elongation varied from 1½ to 2¾ inches, so as to allow of complete hyperextension of the hand and fingers. The anterior capsule of the wrist-joint was then divided transversely, so that the carpal bones could be extended to their full degree. Fatty tissue flaps were interposed between the points of suture and egg membrane was used to wrap a few of the tendons.

Results.—Healing occurred per primam, with complete restoration of flexion and extension of all of the fingers individually. The young man has developed into a very good amateur pianist, which speaks for the result obtained in this case. The function of his arm and hand is not impaired and the strength of his arm in contraction has been restored wonderfully, to a greater degree than one would expect considering the degree of atrophy of the muscle bellies.

The division of the joint-capsule, associated with elongation of the tendons, does not receive sufficient attention in the literature on the subject. It is necessary to secure a permanent and a good result. After prolonged contractions in the neighborhood of the elbow, when the biceps tendon has been elongated, the forearm will not come down unless the anterior capsule of the joint is divided. Then it can be forced down gently, stretching the fibers of the brachialis anticus and the nerves, arteries and veins in the trochlear space. Occasionally this stretching of the musculospiral and median nerves in front and the ulnar nerve behind produces a complete paralysis of the muscles of the forearm. This is due to the suspension of transmission of nerve impulses in the axons by what I believe to be an edema following stretching. It disappears in from two weeks to four months. In every case under my observation the function of the muscles was completely recovered.

The following case illustrates the elongation of tendons by plasty when they have been destroyed, and the preparation of the forearm or wrist for tendon elongation, that is, where a flap must be transplanted from the abdomen or thigh to the forearm, in order to give sufficient tissue through which to transmit the tendons.

CASE 34.—*Patient.*—M. H., brakeman. Family and personal history not pertinent to present condition.

Present Trouble.—October, 1904, while coupling cars, his left hand was caught between the draw-bars of two cars. He was removed to a hospital, where the hand was properly cleansed and dressed, under anesthesia. The lower end of the radius and tissues of the hand were crushed and lacerated; some pieces of bone were removed. He remained in the hospital a month, part of the skin and tissues involved in the injury having sloughed. About Nov. 1, 1904, the thumb of this hand became gangrenous, because of ischemia due to the defective circulation through the injured wrist, which was almost amputated.

Treatment.—A large flap was freed from the abdominal wall and sutured on to the wrist to fill in the gap. This restored the circulation to such a degree that only a small portion of the thenar eminence necrotized. Two months later a portion of the original graft was swung around to fill in the gap between the ulna and radius. All of his flexor tendons had been divided by the injury. He had a puffy, distended wrist from the large quantity of fatty tissue present in the transplanted skin flap. Immediately after entering the hospital the gangrenous tissue of the thumb was removed and the tendons in this area were cut off and left loose. Two months later these loose tendons were caught up and sutured to the fat and fascia of the palm of the hand. One and a half years later a second operation was performed. Part of the ulna was removed to permit of flexion of the wrist and at the same time an elongation and reattachment of all of the flexor tendons was made. These tendons were carried forward through the adipose tissue of the graft. This operation was performed by my associate, Dr. J. M. Neff.

Results.—The patient has had a fairly good use of the hand since the last operation. The thumb can be adducted slightly; little finger can be flexed; other fingers can be flexed together, but not separately. In November, 1908, he had good muscular contraction, with extension of the fingers, but limitation of motion in the wrist. He returned to his occupation as a brakeman.

If the anterior or posterior group of tendons are contracted and fixed to the bone to such a degree that plasty cannot be performed, then an excision of the bone should be made, the forearm or arm shortened, and the muscles and tendons placed under favorable conditions for mobility, with muscular contraction and relaxation. Fat and fascia should be interposed between the tendons and the bone. If this cannot be obtained from the neighborhood of the injury, it may be obtained from the fascia lata of the thigh. It is essential that the periosteum and the skin should not become attached to the line of the new union of muscles or tendons, as these fixations are a great impairment to motion by subsequent muscular contractions and relaxation.

CONGENITAL CONTRACTIONS

In congenital contraction or deformities of joints not due to paralysis of opposing groups of muscles (Case 35), three elements must be taken into consideration in order to obtain good results: 1. The elongation of the contracted tendons. 2. The division of the capsule of the joint at the site of the contraction, so as to permit the limb to be restored to its normal position and to pass through its anatomic range of motion without tension on the capsule. Capsulotomy is preferable to laceration of the capsule by force. 3. In addition, there should be the shortening of the opposing muscle tendons, as when the Achilles tendon is shortened in talipes equinus.

CASE 35.—*Patient.*—C. O., aged 8 years, has never been able to use his right hand because of an upper motor neuron lesion of congenital origin.

Examination.—This shows a drop-wrist. He can use all of the shoulder muscles and biceps, triceps, coracobrachialis and brachialis anticus. There is loss of function in the short flexors and extensors; also in the long flexors and extensors except the long extensors of the little, middle and ring fingers; absence of pronation and supination.

Treatment.—The patient was operated on Nov. 9, 1909. The lesion was an upper motor neuron lesion because all the nerves and muscles responded to faradic electricity. The flexor carpi-ulnaris, which was active, was united to the flexor sublimis and profundus digitorum of the ring, middle and little fingers; also all of these tendons were elongated and reunited. The flexor carpi radialis was united to the flexor longus pollicis and flexor indicis. The flexor profundus digitorum of index and little fingers was also united to flexor carpi radialis, each of these having their tendons elongated 1½ inches. The palmaris longus which was alive, was attached to the flexor indicis. The radial, median and ulnar nerves were intact; all responded to the faradic current as well as all the muscles in the forearm. November 16 there was complete primary union. Stitches removed. The mold was left on six weeks, then motion and massage of fingers and wrist was started. Finger-motion was started in the third week with the mold on.

Result.—The wrist could be held straight out and motion was slowly returning to the fingers at the time the child left the hospital. The hand was on a palmar splint.

The elongation of the tendon, the division of the posterior capsule of the tibio-astragaloid articulation and the shortening of the extensor tendons of the foot, par-

V. 58
1912

ticularly the tibialis anticus, should be effected. When there is a tendency to equinovarus or valgus, the tibialis anticus should be shortened without division. When there is a tendency to equinovalgus, the tendon of the tibialis anticus should be split and half of it detached, passed subcutaneously across the ankle and attached to the external surface of the cuboid bone, imbedding it in the periosteum and fibrous capsule. The external half of the tendon ought to come on tension before the internal half, so that with every contraction of the tibialis anticus the first tendency of the foot will be to move upward, as toward eversion, and, finally, as the two forks of the tendon come on tension there is straight extension.

The significance of this implantation of the tendon is very great and contributes materially to the result. When there is a pes cavus present at the same time, there should be, before the tendons are transplanted, a division of the calcaneus attachment of the deep plantar fascia, so as to permit the fascia to extend freely in the direction of the toes. This is done with a tenotome. In addition to that, there should be a division of the long and short plantar ligaments and of the scaphocuneiform and scaphocuboid ligaments. It is rarely necessary to divide the tarsometatarsal ligaments. This can be done with a long tenotome. The instrument is passed beneath all of the flexor tendons of the toes and foot and often beneath the tendon of the peroneus longus. With gentle pressu then, the lower articular margins of the tarsal bones can be separated and the foot elongated, so as to hypercorrect the pes cavus and make it a pes planus. The muscle tendons in these cases do not need to be divided after the plan of Phelps; neither will the arteries or nerves need to be destroyed, if a little care is exercised and proper anatomic bearings noted.

CASE 36.—*Patient.*—R. G., aged 15, was admitted Feb. 2, 1912. The family and personal histories were negative. The patient has never had any injury, rickets or bone disease; nothing that would have any relation to the present trouble; no chills, fever or history of infection.

Present Trouble.—When 7 years old his mother noticed that he wore his left shoe sole through more quickly on the outer side near the front of the foot, but could not see any deformity of the foot. He played like other children. Not until three years later (five years ago) was a deformity of the foot noticeable. Since that time the deformity has been increasing in degree. There is no pain except a dull ache after standing on the foot for some time.

Examination.—There is no tendency of the foot to turn either in or out. The Achilles tendon was strongly retracted but the heel touched the floor under great strain when the patient stood erect, but when in a comfortable position he had a superlative equinus with the articular end of the tibia resting on the posterior surface of the astragalus. Equinus was present, also a tendency to eversion of the ankle. Eversion and abduction were less than inversion and adduction. There was greater contraction in the plantar fascia which was very short and formed an extremely high arch; no paralysis in muscles of the anterior tibial, peroneal flexor or extensor groups; no evidence of rickets or any bone disease. Heart and lungs were normal. The urine was negative.

Treatment.—The Achilles tendon was lengthened. The inner half of the attachment of the astragalus was taken off with its periosteum. The Achilles tendon was then split upward a distance of 2½ inches and its outer half divided at that point. This permitted of extension of the foot to the full degree. After rupturing the posterior annular ligament with repeated extension efforts, so that the foot could readily be put in and easily held at an acute angle to the tibia, the ends of the divided Achilles tendon were reattached, making an elongation of about 3 inches. The future contraction of the Achilles tendon would all come on the outer half of the tubercle of the os calcis, and there would be no contracting force on the inner half. The plantar fascia was then divided subcutaneously just anterior to its attachment to the tubercle of the os calcis, and the plantar, tarsal and metatarsal ligaments were divided clear across the arch. This permitted of a fair reduction of the pes cavus. The tendon of the tibialis anticus was split from its attachment to the internal cuneiform bone upward, until it reached to the annular ligament. The periosteum and ligaments were then exposed at the cubometatarsal articulation. A hemostat was passed beneath the tissues to the opening at the end of the ligament and half of the tendon of the tibialis anticus was grasped and drawn out and sutured to the periosteum of the cuboid bone at its outer and anterior portion. Sufficient tension was put on this to produce pronounced relaxation of the internal half of the tendon of the tibialis anticus, which was left attached to the cuneiform bone. The purpose of this reattachment was to convert the tibialis anticus from an internal rotator of the foot to an external rotator, and to balance the contractors of the foot so that the astragalus would be held plumb beneath the articular surface of the tibia. All of the flexor tendons of the toes were divided without suture over the middle of the first phalangeal bones. By the transposition of the attachments of the Achilles tendon to the outer side of the tuberosity of the os calcis, and of the tibialis anticus to the cuboid, the foot was drawn outward at every contraction, either in extension or flexion. This was beautifully illustrated when the boy was examined four weeks after operation. With every effort to extend or flex the foot it was abducted instead of adducted, and he walked plumb on his astragalus.

Fig. 127.—Superficial dissection of sole of right foot (subject lying on belly), showing plantar fascia. 1. Plantar fascia, central portion. 2. Plantar fascia, inner lateral portion. 3. Plantar fascia, slip for great toe. 4. Flexor longus hallucis tendon. 5. Superficial transverse metatarsal ligament. 6. Os calcis, inner tubercle. 7. Calcaneometatarsal ligament. 8. Plantar fascia, outer lateral portion. 9. Plantar fascia, digital slips.

I feel that this correction should never be performed by the heavy crushing instruments in use by orthopedists up to this time. They are unsurgical as well as unnecessary. The same method of elongation in congenital deformities of the upper extremity should be carried out and the same principles applied. It is unnecessary to detail them in citing cases, because I mentioned the particular technic for the individual situation. When the tibialis anticus is out of commission, the extensor longus hallucis or extensor communis digitorum or even the peroneus brevis may be effectively used to take the function of the tibialis anticus (Figs 127 and 128).

Paralysis of counteracting groups may be due to (a) anterior poliomyelitis; (b) meningitis, cerebral or spinal or both; (c) paralysis from divisions and disease of the nerve-trunks.

In the treatment of all of these conditions a careful analysis of the muscles retaining their contractility must be weighed before one decides on the transplantation of the tendon attachments to be made. When this is clearly outlined, one must take into consideration the desirability and advisability of producing an arthrodesis in one or more of the joints in the impaired extremity. Arthrodesis with transplantation of muscle attachments often produces a very effective restoration of function of the limb and renders a limb that is comparatively useless

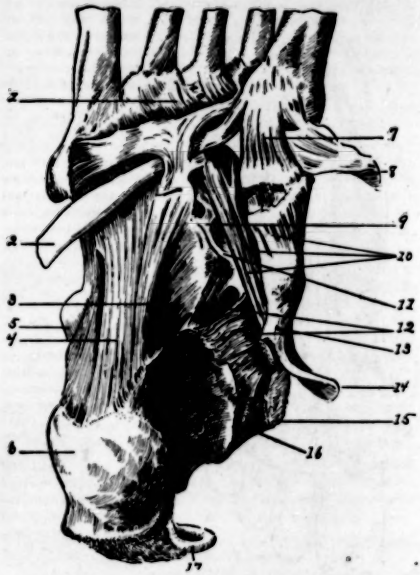


Fig. 128.—Right tarsus, inferior aspect. 1. Intermetatarsal ligament. 2. Tendon of peroneus longus. 3. Short plantar ligament. 4. Long plantar ligament. 5. Peroneal spine. 6. Calcaneum. 7. Tarsometatarsal ligament. 8. Tendon of tibialis anticus. 9. Cubocuneiform ligament. 10. Scaphocuneiform ligament. 11. Scaphocuboid ligament. 12. Inferior calcaneoscaphoid ligament. 13. Scaphoid. 14. Tendon of tibialis posticus. 15. Internal malleolus. 16. Sustentaculum tali. 17. Tendo Achillis.

of very material service. Both of these are secondary to the consideration of the possibility of transplantation of the axon so as to restore muscular contractility in the already paralyzed muscles.

In the paralysis following anterior poliomyelitis, which is the most common lesion causing circumscribed muscle paralysis, the neurons are often so badly damaged that short-circuiting of motor impulses cannot be effected.

The fields in which this is most valuable is in paralysis of the external popliteal without paralysis of the internal popliteal, where the axons of the external popliteal can be inserted into the axons of the internal popliteal with great advantage to the patient.

The next are the muscle groups of the arm, the ulnar and median. When one or the other of these groups is impaired the nerve transplantation may be effectually made so as to restore function, paralysis of the median nerve being the all-important one. The nerve transplantation should be made months before the tendon transplantation is attempted, so that, if possible, there may be nerve restoration and muscle contraction in effect at the time the tendon transplantation is carried out.

CASE 37.—*Patient.*—R. B., aged 24. The family and personal histories were negative.

Present Trouble.—At the age of 8 years the patient fell from a porch, breaking the left radius at the junction of the lower and middle thirds. Anterior and posterior splints were applied at once and were not removed for five or six weeks, at which time union was perfect. Functional ability was impaired but use of the hand returned rapidly. During the next few months the patient noted a gradually increasing inability to extend the middle, ring and little fingers on the left hand, seriously interfering with the function of the joints of the hands and fingers. In December, 1896, a physician made an incision following the course of the ulnar nerve from elbow to wrist and stated that he freed the ulnar nerve from many adhesions. This operation was non-productive of results. In May, 1898, a physician advised forcible extension of the fingers and retention by a mold. This was attempted but the procedure was extremely painful and seriously interfered with the blood-supply in the fingers, necessitating its abandonment. The doctor then advised tenoplasty in the hand, which was done in the same month, the tendon to the little finger alone being operated on. No result.

Examination.—In the fall of 1902 there were the following findings: Left hand and forearm were smaller than right. Flexion of wrist was normal; extension diminished; flexion of fingers normal. With wrist extended, middle, ring and little fingers were well into palm. With wrist and hand midway between flexion and extension, i. e., straight with line of forearm, middle, ring and little fingers were three quarters flexed. Fingers could be extended only when wrist was in position of supreme flexion and hand was well adducted. Fluroscopic Examination: Radius, ulna and metacarpals normal.

Treatment.—All of the muscles reacted to voluntary impulses and responded positively to the faradic current, showing that there was no motor neuron lesion, and that operations on the nerves could not and should not be considered. All of the flexor tendons were lengthened for 1¼ or 2¾ inches, including the palmaris and both the flexor carpi. The flexor tendons were lengthened. Immediate primary union and marked improvement resulted. With the wrist extended middle, ring and little fingers were far from being pulled into the palm of the hand. In December, 1903, a second operation was done to rectify the condition still further. There was still additional lengthening of the tendons and immediate primary union. With the wrist extended there was no flexing of the fingers. Movements of the hand and fingers are practically normal. There is inability to flex the distal phalanges fully; this is slight and is not noticeable in the daily use of the fingers. The hand and fingers are strong.

Result.—In July, 1911, the patient had perfect flexion and extension of all the fingers and thumb and wrist. His hand is perfectly useful in all of his surgical work.

Unfortunately, too many of the cases of paralysis following anterior poliomyelitis are discarded or overlooked as surgical possibilities, and braces and other substitutes for tendon transplantation are adopted. There is a splendid field for the application of these principles in this class of cases, a fact of which the general practitioner should be made aware.

The cicatricial contraction of skin, fascia, muscles, etc., is a very complex proposition as applied to joint-deformities. Burns of the third degree in the popliteal space, in the groin, in the trochlear area, and in the axillary and neck zone produce the most distressing type of scar fixation of a joint. Less frequently burns on the anterior surface of the forearm and wrist, on the anterior

V. 58
1912

surface of the ankle or in the zone of the heel cause incapacitating deformities.

One cannot think of this subject in a serious way without mentioning the prophylactic management of these cases. In the whole range of surgery there is probably no class of cases that is so badly managed from the final outcome standpoint as burns of the extremities, and no class of cases that offers such a great reward for a little attention and a little minor surgery as the treatment of burns in the early stage. The contraction following burns is due practically to the formation of connective tissue in great masses and the granulation tissue which forms during the process of repair. There should be a well-defined and definite time for action in the treatment of burns, namely, as soon as the slough has disappeared; that is the time for skin-grafting, before a firm connective tissue mass has formed beneath the granulation tissue. Practically all burns should be grafted within two to six weeks from the time they are sustained. The nearer to two weeks, the greater will be the percentage of grafts which can be made to live and the more nearly normal will be the restoration of function after this procedure.

CASE 38.—*Patient.*—J. R., aged 20 years.

Present Trouble.—Seven months ago, Feb. 11, 1904, he was working inside a boiler when a valve broke letting in steam which scalded him. He was able to stick his head out of a hole in the iron and this was the only part of his body not burned. Scar tissue has formed on neck, hands, lower extremities, abdomen and few spots on chest; one area on right forearm not healed. He has contracture of scar tissue of palm of hand and forearm, so that fingers are stiff with limited motion and held in flexion. Extension of right wrist greatly limited, also slightly so in left wrist.

Examination.—There is cicatricial contraction of skin on palmar surface of fingers of left hand flexing all fingers acutely; same on wrist. This skin and tissue greatly thickened; tendons on right hand not affected.

Treatment.—Operation: Sept. 14, 1904. Cicatricial skin and tissue on anterior surfaces of four left fingers dissected away down to fat covering tendons; skin on tips of fingers left. Likewise dissection made on inner side of left thumb down to tendons and from palm and anterior surface of left wrist. Tendons of left hand were not cut as fingers could then be well extended after exsection of adherent tendon sheaths. A large flap of skin about the size of the left palm with half an inch of adipose tissue was dissected off the upper and central part of chest leaving base of flap below. Five other incisions were made to the outer side of this flap on the chest and four strips of skin were dissected up toward the base, each flap corresponding in size to the palmar surface of each finger. The hand was then turned over on the chest and the chest flap sutured to the outer side of the left hand, at edge of dissection on hand, while the four flaps of skin were alternately sutured to the palmar surfaces of the fingers with fine silkworm gut. The hand was dressed and strips of adhesive plaster placed over left forearm and hand and brought to chest. Plaster of Paris was applied over the forearm and hand.

Results.—The extreme tips of two of the finger flaps became necrotic. The large palmar and dorsal surfaces of the flaps adhered and became firmly attached. Twelve days later half of the flaps were detached and two days after that the entire flap was detached from the chest. No necrosis of flap following detachment. The fulness in the fingers resembled that of a stuffed glove. There was full extension and flexion of the fingers, which has remained permanent. The adipose tissue in the flap rapidly absorbed as the result of the pressure exerted on it by the use of the hand, and gave a cushion that was elastic and free from contractile tendency.

The Thiersch graft is the ideal one as a primary treatment. Why should a burn be permitted to go six months and ten months or years and be followed by extensive scar formation and contraction leading to deformity? What is the explanation or rationale of such a treatment? Absolutely none, except that of incompetency on the part of the surgeon in charge.

After the contraction has taken place the case presents itself to the surgeon as a deformed joint or limb, the result of cicatricial contraction, either of the skin alone or including the deeper structures and even the capsule of the joint. If it involves the skin alone, a large transplant from the neighboring tissue to the full depth of the skin and including a considerable quantity of adipose tissue gives the best result. The skin can then expand with the contraction of the scar tissue that may form above and below the place of insertion of the transplant.

Pedicle transplantation gives the best result at this stage of the disease. When the upper extremity is involved, the flap may be taken from the chest or abdomen. When the lower extremity is involved, the flap should be taken either from the same or from the opposite leg. I have had cases illustrating both types of conditions, and these will be cited in the monograph.

The reason the scars in the axilla and popliteal space cause so much trouble is that the attempt at motion in the joint always causes a hyperplasia of the connective tissue of the scar, or a tendency to keloid formation. This is also noticeable in the scars of the neck. Wherever there is excessive motion in scar tissue, the tendency is always to hypertrophy of that tissue.

It is interesting to note the rapid absorption of the upper and lower portions of scar tissue that are permitted to remain after the insertion of an elastic skin-flap in the center of a firm cicatricial keloid mass, showing that the relief of tension at once favors the absorption of the scar tissue. This is true in burns of the hand, face, neck and so forth. One can see that the skin-flap with $\frac{1}{8}$ or $\frac{1}{16}$ of an inch of fatty tissue beneath it will expand to twice its original size in a few months if it is surrounded by scar tissue or subjected to repeated or continued traction and still retain all of its pliability and softness. These transplanted flaps are often hypersensitive to a very annoying degree through the regeneration of the peripheral nerves of sensation.

Annular scars are dangerous to the circulation of the extremity and occasionally cause gangrene. We all recall annular scars produced by the typical Schede operation on the leg for varicose veins. I remember seeing at one time in the County Hospital two cases of gangrene of the foot some months after the Schede operation, owing to the contraction of the annular scar just below the knee.

The compression from annular scars is very easily remedied by dividing the scar throughout its entire width, at right angles to the circumference, and inserting in the line of division, after freeing the normal tissue, a pedicled flap from above or below. By doing this in one or two places in the circle the cicatricial tissue is rapidly absorbed, compression from the scar ceases, and the circulation is restored at the same time that the scar tissue is elongated and the implantation made.

It is frequently necessary, where a firm contraction has been permitted to go on for years and the leg has become deformed, for instance, to make a division and elongation of the two hamstring tendons and possibly make a division of the posterior capsule of the knee. If the contraction has existed only for a comparatively short time, capsulotomy is unnecessary, although tenotomy and tenoplasty may be demanded. In all of this class of work the capsule and the tendons and the remaining tissues should be so fully elongated under anesthesia that

the limb rests in a perfectly straight position and can be put through its full normal range of motion without great force or tension; otherwise, when the patient comes out of the anesthetic, motion will be limited and deformity will be persistent.

It is remarkable what extremes of contraction may take place with complete division of the bellies of large muscles. If the gap is too great or the muscle-ends become fixed to the periosteum, full restoration of function cannot take place. Even when there is a great depression in the belly of the muscle following suture, or in subcutaneous union without suture, the full strength of the muscle is often restored. The upper or lower fragment of the muscle following a compression myositis, as described above, greatly hypertrophies and renders wonderful service, considering that only a small percentage of the muscle cells is retained.

I had a patient, an athlete, who made his living by athletics and who had a traumatic division of his right biceps. It was one of the largest biceps I ever saw. It was a railroad accident, and he agreed that if his muscle power was restored to its full lifting capacity, he would expect no damages from the railroad company. Eight months after the accident, when he produced a contraction of his biceps, my fist could be inserted into the gap between the two ends of the muscle; still he could lift with that biceps a greater number of pounds than he was able to lift before the accident. It had not been united by suture. It was a subcutaneous division and a subcutaneous automatic reunion.

HETEROLOGOUS TRANSPLANTATION OF LIGAMENTS

Wherever the tendons have been destroyed and there is not sufficient tendon material left for elongation, homologous transplantation should be made. Portions of tendons can be taken from any of the other tendons in the patient's body, the Achilles tendon being an excellent source. The long flexor tendons in the forearm can have some of their substance removed and still not have their function impaired in any way. These same tendons may be used as substitutes for ligaments in flail joints or joints with excessive motion, particularly in the knee, where substitutes for the external lateral ligaments may be necessary following arthroplasty.

Silk may be used as a ligament producer or stimulator. It can be inserted so as to induce development around it of a mass of connective tissue which will give mechanical support or, if used as a tendon, will favor the generation of a sufficient quantity of connective tissue fibers to carry on the function of the tendon. After the silk has ceased to give the least support, it is no longer of use.

The after-treatment consists, first, in waiting until the wound has healed entirely and, second, in gradually instituting passive and active motion. In tendon elongation active motion should be resorted to at first, as the patient forms the best estimate as to the sensation of pain or discomfort, and the contraction which the impaired tendon will tolerate. At the end of four and a half to six weeks, when an organic union of the tendon has taken place, passive motion may be induced to a great degree, and must be encouraged. During the process of repair of the tendons the limb should be fixed with a plaster mold or other mechanical support in an overcorrected position, so that any fixation of the tendons that may occur in a transverse direction will be a fixation with the tendons amply elongated. Where muscles have been contracted and atrophied for a number of years, the restoration of voluntary contractile power takes months.

A CASE OF MYOCLONIA OCCURRING ONLY AFTER REST OR SLEEP *

L. PIERCE CLARK, M.D.
NEW YORK

The essential myoclonias have had a more than usually difficult pathway to their full recognition as morbid states since the first description of paramyoclonus multiplex by Friedrichs in 1881. There are those who still claim that myoclonias have not passed beyond symptom complexes, parts of the hysterias, or the epilepsies, and as an accompaniment of those more frankly established organic diseases of paralytic encephalopathies, hemiplegias, and the residual irritative scleroses and softenings of the latter group. To prove that the myoclonias are but syndromes, their occurrence even in organic spinal affections such as myelitis and poliomyelitis is cited. However this may be for types of pseudomyoclonia, the pathogenesis of essential myoclonus is now known, in the majority of cases, to develop on a basis of neuropathy from which many other types of the spasmophilia may coincidentally also take their origin, either in the myoclonic's own family or in collateral branches of the same family stock. No really new conception of the nature and pathology of the affection has been brought forward in the past decade. Writers and observers on the subject in about equal proportions assign its pathology respectively to the terminal neuromuscular apparatus, lesions of the cortex, or lesions of the spinal cord. Its symptomatology and the surmise as to its etiopathology as a disease entity may be found in most recent text-books on neurology. Many variations of the disease have been subject of report in modern literature. Thus the association disease of myoclonus-epilepsy, which was first established as a clinical entity in this country under this name and which was further elaborated on in the extensive case reports of Lundborg, is but one of the variant manifestations of the pure disorder as laid down in Friedrich's classic description of paramyoclonus multiplex mentioned at the outset of this paper.

This strange convulsive disorder of myoclonia appears in most cases at rather definite intervals of hours, days or weeks. The subjects suffering from the uncomplicated or essential disease show no disturbance or loss of consciousness during the attacks, and are rather keen and alert in analyzing their own disease. Thus the disorder is an ideal one in which to study many of the conscious but uncontrolled manifestations of clonic spasm.

During the past few months a very interesting case of the classic type as regards symptoms has been under my close observation and study in a young man of 24, in whom the contractions are made to occur in an almost experimental manner by the simple expedient of requiring the patient to take a more or less prolonged rest, attended or not by sleep. In brief the case history is as follows:

Patient.—J. S., a bright, alert, unmarried man, aged 24, a college student, reported to me as suffering from uncontrolled cramps in his legs after resting. There is no distinct nervous disorder in the family history of either parent, but my patient is the eldest of a family of three children, of whom the second is an epileptic under my care, and the third, a girl, is of a "highly nervous temperament."

History.—My myoclonic patient was born at full term, but after a face presentation. There was some asphyxia at birth, about one-half minute being consumed in the resuscitation.

* Read before the Section of Neurology and Psychiatry, New York Academy of Medicine, March 12, 1912.

V. 58
1912

The head was elongated and otherwise misshapen. He weighed 9¾ pounds at birth. These not especially pathologic incidents of birth, however, resulted in no special abnormal infantile life. The child was breast-fed for two or three months and after that period he was gradually weaned to artificial feeding. There was no constipation. Teething began normally and without special difficulty at 4 months. As soon as the child began to stand and walk, at 18 months, the mother noticed he frequently "made queer movements in his legs," stumbled and often fell. Some neurotic features in development were also noted about this time. For two years the little patient was an incorrigible thumb-sucker and often delighted himself for hours in pulling his own hair and banging his head on the floor. These habits were, however, outgrown or controlled entirely at 6 or 7 years of age. At night he was always "restless in sleep" but slept quietly an hour and a half during each day. Nocturnal enuresis occurred in early childhood and has persisted more or less as an ineradicable habit even to the present day.

On medical observation at 4 years of age it was found that when he attempted to walk, after a prolonged rest, either with or without sleeping, all the voluntary muscles of the trunk and extremities underwent arhythmic and asymmetrical contractions which the little patient was entirely unable to control; the violence of the muscular contractions frequently threw him to the ground. The attacks, for they were considered as a phase of jacksonian epilepsy, a form of *petit mal moteur*, lasted for a few seconds only; were most intense at the beginning, and the muscle contractions gradually ceased as the patient seemed to exert his will in their control. All the muscles of the body, even those of the face, are said to have been involved at this early age. The proximal muscles of the thighs and arms were most engaged in the clonic spasm, and those of the extensor group were most strongly involved. The little patient was always conscious, never bit his tongue or passed urine in an attack. Inasmuch as there was no epileptic cry in any of these attacks, no immobility of pupil during the muscle contractions, nor vasomotor changes as seen in classic epilepsy, and, in the continued absence of the mental stigma of epilepsy, the diagnosis of epilepsy was seriously questioned. Several years passed in study and ineffective treatment, and as no general plan of treatment was found of lasting benefit, the parents finally decided to allow the patient to go without any treatment and let him "gradually outgrow the affection." He was then 13 or 14 years of age. It had been observed, however, that on leading a hygienic and regular life the patient did gradually improve. In time, by a clever trick of stepping about briskly on attempting to stand or walk, the patient was able to disguise in part the manifestations of the convulsive disorder, especially to those other than the family. Then, too, in time he seemed to gradually gain more control of the large muscular contractions. He never had an attack in deep and quiet sleep, although when he turned over in bed or greatly shifted the position of his body the contractions were sure to occur with great violence. The major attacks always occurred in the early morning hours. The left side seemed to be most involved. The patient says that he now occasionally feels as though the muscles of his face move in the great attacks; a close observer, however, sees no grimaces or alteration in facial expression in the attack.

The usual modifying influences of heat, cold, emotional shocks, etc., have no effect on the myoclonic contractions in the patient. It should be added, however, that during an attack of scarlet fever, at 7 years of age, the myoclonic contractions were very severe and exhaustive. A sort of status myoclonus obtained for nearly the whole of three days during the height of the fever. For several days after this period he was practically free from violent contractions even during the after-rest periods, a fever replacement not uncommon in the history of this myoclonic individual. The myoclonus does not seem to have seriously altered the normal physical and mental development. A series of more or less classic attacks of myoclonic contractions were personally witnessed by me and the following notes were made at the time:

The patient went to sleep at 11 p. m. in a strange bed, in somewhat noisy surroundings. The night was very warm, but he fell asleep quickly and slept soundly and quietly until 2:15 a. m., at which time, in turning from the left side on which he had been quietly sleeping, the muscle movements began with quick clonic contractions, arhythmic and asynergic, in all the proximal muscles of the neck, trunk and extremities. At times there was but slight fibrillary tremor in the larger muscles (the deltoid and gluteal in particular), and at other times the mass movements of muscle play were sufficient to twist and hurl the body about as though the patient were wrestling with an unseen adversary. The contractions were as sudden and quick as those seen in ordinary classic myoclonia. The patient was fully conscious throughout and seemed rather amused than otherwise at the phenomenon. The full excursions of the different movements were greatly curtailed by the voluntary effort of the patient, who with great quickness foiled the full excursions of the larger contractions. The more intensive movements in the larger muscles ceased in about one minute, but some fibrillary twitchings in the muscles of the forearm and leg continued for one minute longer.

On the whole, it may be stated briefly that in this attack and in several others witnessed within the next few hours, the attacks were sudden and violent in onset and ended by a gradual subsidence of range and frequency of clonic spasms. The severest attack of the single night series, however, occurred on rising for the day at 7:30 a. m. I made quite sure that the partial waking, as in the turning movements, induced the contractions, and not the reverse. The patient exercises control over the contractions by tensing the opposing muscles to those engaged in spasm.

It has been found that prolonged rest or exercise alters little the severity and frequency of the attacks. Of late years it has been noted that marked indulgence in coffee and alcohol react very unfavorably on the condition, especially noted in increased contractions for days after such indiscretions.

In brief, then, it may be said we have here a case of classic myoclonic contractions of unknown origin, aside from possible obscure hereditary causes and slight injury at birth, which afflicts the patient largely if not solely after rest and only during that physiologic period in which normal tension of muscles is brought about, as in walking or standing.

The case is, however, not quite so unique as one might at first suppose. A review of the literature of our subject shows that in a patient of Lundborg's who had nocturnal myoclonus with epilepsy, the mild attacks of myoclonus did not rouse the patient from sleep, but strong ones did. It is not stated in the author's text whether the partial waking of the patient inaugurated the contractions, as in my case, or the reverse. In this case of Lundborg's, the nocturnal attacks gradually grew worse while the diurnal movements were relatively quiet after bad nights. The epilepsy, which remained entirely distinct from the myoclonia in its clinical occurrence and manifestations, preceded the appearance of myoclonus for two or three years. Another case, which was reported by Unverricht and which was described in that author's first family group of myoclonus, also showed that the patient had nocturnal epilepsy before he developed myoclonus; the epileptic attacks occurred nightly but no definite mention of the relation of the myoclonia to sleep was recorded. But in a case reported by Bührer in which nocturnal epilepsy occurred before the development of myoclonus, the latter was almost continuous during the greater part of the daytime. The myoclonic contractions quickly and completely subsided on going to sleep, but mere turning over in bed while asleep or waking at night caused it to reappear, so that some nights were very bad. Another case, still more analogous to mine here recorded, was one of Lundborg's in which

the epilepsy began the association disease (myoclonus-epilepsy) and was matutinal for some time before myoclonus developed in the case. The myoclonic contractions were relatively quiet when the patient was asleep but she was forced to sleep sitting in order to gain greatest freedom from both her epilepsy and myoclonus. It is recorded that when this patient awakened or was awakened by some one suddenly, she became very myoclonic and when she awoke at 4 or 5 o'clock a. m. the myoclonus was at its worst. In still another case of Unverricht it was recorded that the patient was not free of myoclonus during sleep. And in still another case, by the same author, it was stated that there was usually no myoclonus at night, but on some nights violent contractions occurred so severely that the limbs had to be held. No mention was made of the patient's condition in partial sleep or on fully waking.

In a case of Krewer's the myoclonus was *almost* absent during sleep. In another case of Lugaro's the myoclonus ceased on going to sleep, as has been usually noted in this association disorder, but the myoclonic contractions were resumed during the act of waking, so that the patient was often fully aroused by them. In Rabot's case the myoclonus was especially marked on waking, as was Garner and Santoise's case which was also much more active in the latter half of the night—which is an exact counterpart of my own case.

Thus it will be seen that out of a total of twenty-six cases of myoclonus carefully analyzed in literature, sixteen had positive data regarding the myoclonus during sleep, and of this number seven are recorded as showing a cessation of myoclonus in sleep, while nine cases showed some mention of myoclonus continuing during sleep, or reappearing on or during waking. These citations from literature are made for two reasons, first to show that, contrary to the usual conception, myoclonic contractions may, and indeed often do, occur during sleep or part waking, and also to show that the condition, together with many of its allied states of the spasmophilic group such as tics and habit spasms, are intimately dependent on physiologic alterations of muscle-tone which in the last analysis is intimately bound up with an integral part of the function of the cerebral cortex and is one more link in the proof of the cortical origin of the disease.

There is a marked diminution of the muscle-tonus during rest or sleep. When myoclonic patients are aroused from deep sleep this wave or nerve-impulse flows into the terminal muscle apparatus, which in turn responds in an irritable manner to the abnormal or excess impulse, and clonic spasm occurs. The perturbing spasm is continued until the reciprocating cortical centers and the muscles controlled by them are equilibrated or balanced; then and then only does rest or proper control of the normal waking tension of the neuromuscular system take place. I am aware that this explanation is but a crude clinical hypothesis and has many physiologic defects, but I submit it as the most obvious explanation in our present conception of muscle-tonus.

The essential defect in the cortical control over muscle-tone and the undue responsiveness of the muscles to abnormal nerve-impulses is probably bound up in some metabolic defect, which is probably more often congenital than acquired, and is essentially a physiopathologic defect. The ductless glands and their influence on vascular, muscle and nerve-tissue tonus are being energetically inquired into by a host of workers in the spasmophilic group. The exact application of these intricate studies on spasmophilic phenomena as here considered are of the utmost importance, as the understanding and more exact application of modern chemotherapy rests on them. We cannot make great advance in the nature, pathology and treatment of the convulsive disorders until we do know the proportional importance which the several causes play. To this end remarks on this atypical case of myoclonia are made and placed on record for further analysis and study.

84 East Fifty-Sixth Street.

THE SURGICAL IMPORTANCE OF THE PARATHYROID GLANDS AND CLOSELY ALLIED LYMPH-NODES *

NATHANIEL GINSBURG, M.D.

Associate in Surgery in the Philadelphia Polyclinic Hospital; Assistant Demonstrator of Anatomy in the University of Pennsylvania

PHILADELPHIA

The surgical importance of the parathyroid glands, independent of the development of tumors of these little bodies, is their possible extirpation during excision of one or both lobes of the thyroid gland.

The anatomic relations of the parathyroid glands is definitely established, and their numerical constancy is subject to slight variation, as proved by careful searches by me for these little bodies during the past six years in the Anatomical Laboratory of the University of Pennsylvania.

Since most observers who have recorded their findings dealing with the gross anatomy of these bodies are in accord as to location, number and source of blood-supply, a review of the literature on this subject is unnecessary.

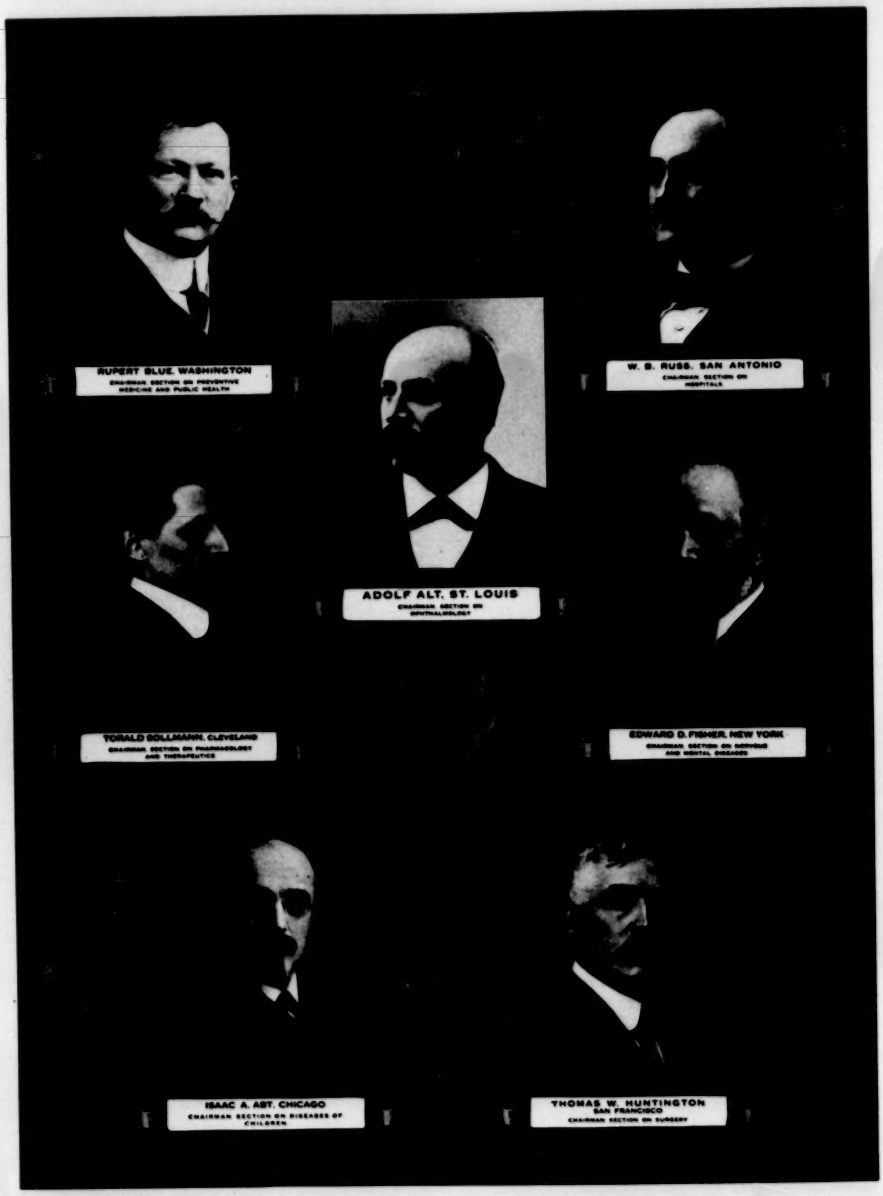
Continued experience in looking for the parathyroid glands, however, has emphasized the fact that their easy identification is not always a simple matter. So uncertain is this identification in many instances, that I am forced to the belief that at times their differentiation from closely allied lymph-nodes is impossible save by histologic examination.

Lymph-nodes in the region of the thyroid gland are numerous, and, at times (not infrequent), their size and relation is unmistakable from the parathyroid glands. The positive recognition of a parathyroid gland by its separate arterial twig no longer holds true, since numerous lymph-nodes have been observed to possess separate vessels, likewise springing from the inferior thyroid artery. This latter observation is especially true in the case of the group of small pretracheal lymph-nodes which lie just below the lower poles of the lobes of the thyroid gland. This is a constant anatomic relation and is well shown by the accompanying illustrations. Since identification in the laboratory is attended with so much difficulty and a considerable expenditure of time, it appears obviously impossible to isolate routinely at operation, either the glandule itself or its nutrient vessel. The employment of colored injection fluids to distend the smaller blood-vessels in the body is the best means of studying their course and distribution. The injection is usually accomplished under considerable pressure, and suffices to fill the minute arteries in the peripheral parts of the subject. Even under these conditions the parathyroid arteries are difficult to isolate and it is often necessary to facilitate their recognition by the use of a magnifying glass. From a practical point of view, how-

* From the Anatomical Laboratory of the Medical School of the University of Pennsylvania.

V. 58
1912

. 58
012

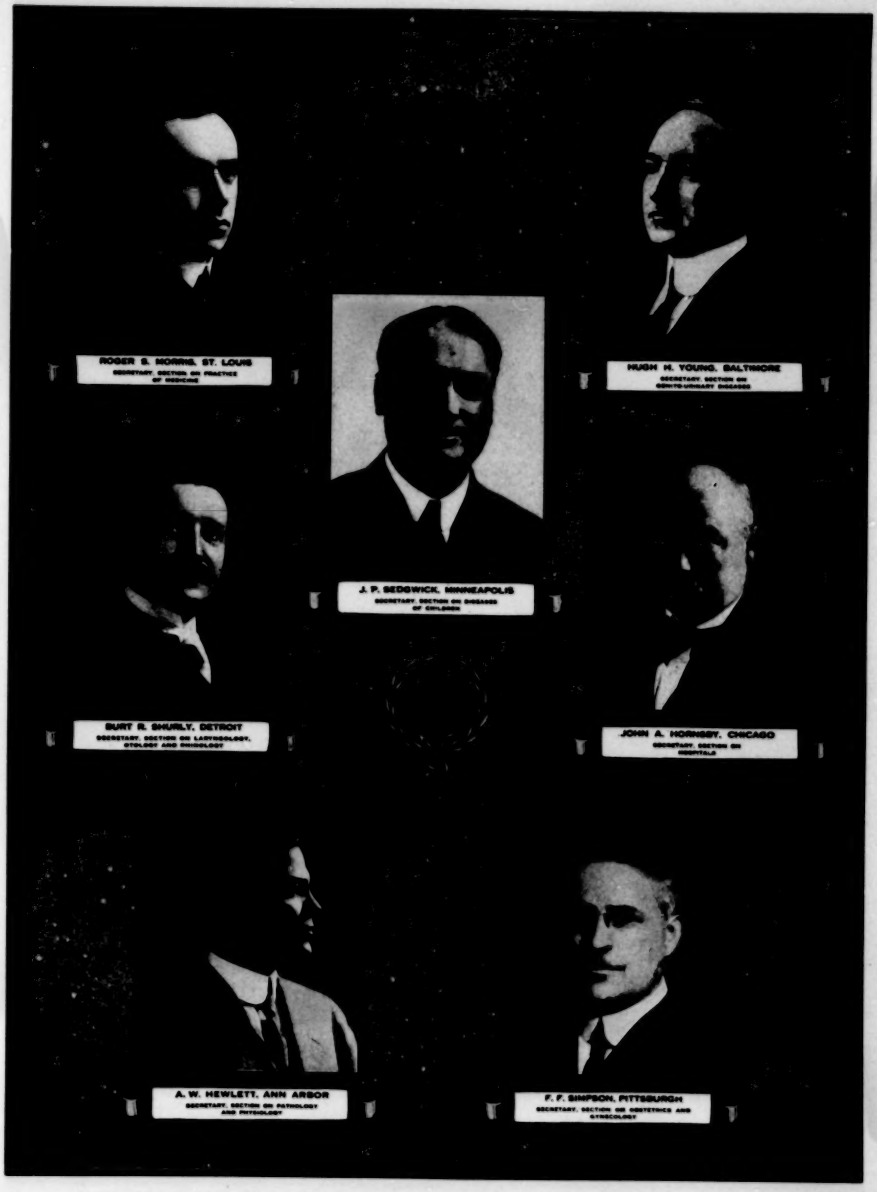

RUPERT BLUE, WASHINGTON
CHAIRMAN SECTION ON PREVENTIVE MEDICINE AND PUBLIC HEALTH
W. S. RUSS, SAN ANTONIO
CHAIRMAN SECTION ON HOSPITALS
ADOLF ALT, ST. LOUIS
CHAIRMAN SECTION ON OPHTHALMOLOGY
TORALD SOLLMANN, CLEVELAND
CHAIRMAN SECTION ON PHARMACOLOGY AND THERAPEUTICS
EDWARD D. FISHER, NEW YORK
CHAIRMAN SECTION ON NERVOUS AND MENTAL DISEASES
ISAAC A. ABT, CHICAGO
CHAIRMAN SECTION ON DISEASES OF CHILDREN
THOMAS W. HUNTINGTON, SAN FRANCISCO
CHAIRMAN SECTION ON SURGERY

SOME OF THE SECTION OFFICERS

THE JOURNAL A. M. A., JUNE 1, 1912

V. 58
1912

v. 58
1912


ROGER S. MORRIS, ST. LOUIS
SECRETARY, SECTION ON PRACTICE OF MEDICINE
HUGH H. YOUNG, BALTIMORE
SECRETARY, SECTION ON GENITO-URINARY DISEASES
J. P. SEDGWICK, MINNEAPOLIS
SECRETARY, SECTION ON DISEASES OF CHILDREN
BURT R. SHURLY, DETROIT
SECRETARY, SECTION ON LARYNGOLOGY, OTOLOGY AND RHINOLOGY
JOHN A. HORNSBY, CHICAGO
SECRETARY, SECTION ON
A. W. HEWLETT, ANN ARBOR
SECRETARY, SECTION ON PATHOLOGY AND PHYSIOLOGY
F. F. SIMPSON, PITTSBURGH
SECRETARY, SECTION ON OBSTETRICS AND GYNECOLOGY

SOME OF THE SECTION OFFICERS

THE JOURNAL A. M. A., JUNE 1, 1912

V. 58
1912

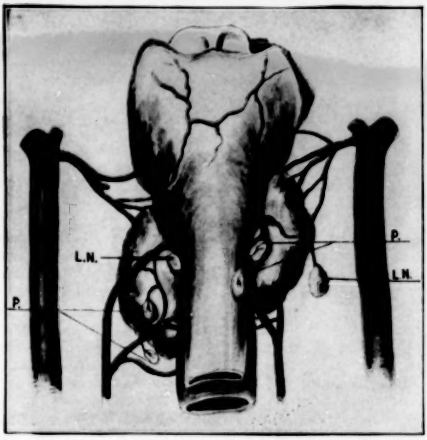


Fig. 1.—Thyroyid gland seen from behind. Note the close association of the parathyroid glands and the closely allied lymph-nodes. P, parathyroid glands; LN, lymph-nodes.

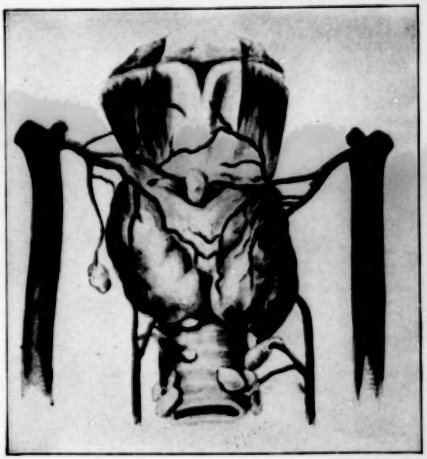


Fig. 2.—Ventral aspect of the thyroid gland. Note the large number of lymph-nodes, some having a separate arterial twig. There are no parathyroids in this drawing.

Fig. 3.—Ventral aspect of the thyroid gland. Note the frequency with which lymph-nodes are found scattered about the pretracheal region in close association to the thyroid gland.

V. 58
1912

ever, it is really unimportant that they should be recognized and isolated during surgical operations on the thyroid gland, because a knowledge of their usual position obviates the danger of their removal or exposure to traumatism. Clinical proof of this fact is the rare occurrence of postoperative tetany in the hands of those surgeons who have recorded a large number of goiter operations.[1]

Since postoperative tetany is so rare, owing to the establishment of a surgical technic which practically ensures the integrity of the parathyroids, the necessity for immediate auto- or heterotransplantation of parathyroid glands is somewhat remote. The impossibility of recognizing an excised parathyroid at operation, its identification being certain only after careful histologic examination, emphasizes the futility of attempting to reimplant the glandule.

The failure of tetany to develop in those cases in which total thyroidectomy had been performed with ligation of both thyroid arteries, was explained in an earlier communication on the basis that existence of an anterior and posterior pharyngeal arterial anastomosis sufficed to insure the vitality of the parathyroids.

Examination of some of the lymph-nodes found in the immediate vicinity of the thyroid gland has revealed unmistakable evidence of tuberculous involvement. Since identification is not always certain, it is not unlikely that tuberculosis of these lymphoid structures may have been confused with a similar pathologic state reported as occurring in the parathyroid glands.

1704 Pine Street.

A DEVICE FOR MOVING PATIENTS

F. F. SIMPSON, M.D.
PITTSBURGH

For a number of months I have been using, with complete satisfaction, a simple device for transferring unconscious patients, very heavy patients, very ill patients and patients with drainage, from the operating-table to their beds, and from one room to another in the hospital.

Because I would be loath to return to former methods and because it might be of interest to others, I venture to present illustrations and a brief description, fully realizing that such a method may have been thought of and even used by others, though I have no knowledge of its previous existence.

It consists of a leaf of sheet iron, as long as the stretcher, and 9 or 10 inches wide, which is attached to the side of the stretcher by strong hinges much after the fashion of the hind gate of a wagon. When the free margin is raised and securely placed on the table, it bridges the intervening space and gives a continuous surface for sliding the patient from the table to the stretcher.

Before the patient is put on the operating-table, two sheets, folded lengthwise, are placed across the table and on top of its covering. The ends of these sheets are folded in accordion pleats and tucked (on either side) under the edge of the pad which covers the table. One of these sheets extends from the head to the hips. The other is so folded that it extends from the hips to the knees. This permits pulling the patient down to the lithotomy position without the sheets being soiled during vaginal work. Before the patient is to be taken from the table she is again placed in a horizontal position and the lower sheet is unfolded, so that it extends from the hips to the ankles.

At the time the transfer is to be made, the stretcher, having a leaf, is put by the side of the operating-table.

Fig. 1.—*A*, folded draw-sheet tucked under pad on operating-table; *B*, end of draw-sheet being folded in accordion pleats; *C*, sheet-iron leaf attached by strong hinges to side of stretcher.

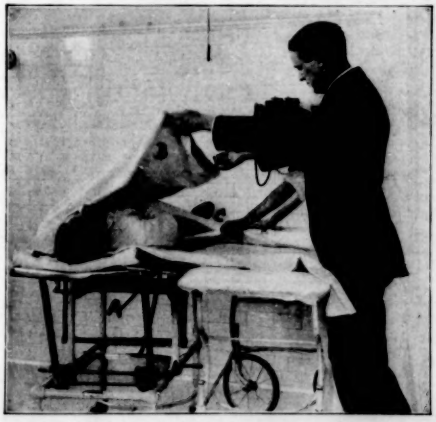


Fig. 2.—*A*, metal leaf of stretcher pushed under side of patient and resting securely on the operating-table; *B*, upper draw-sheet (that is from head to hips) being adjusted; *C*, lower draw-sheet (that is from hips to feet) ready for pulling patient from table to stretcher.

The leaf is raised and pushed under the side of the patient, so that 6 or 8 inches of the full length of the leaf rest on the table. The ends of the folded sheets nearest the stretcher are straightened out and rest on

1. Dr. Charles H. Mayo stated at the meeting of the Clinical Congress of North American Surgeons, held in Philadelphia in November, 1911, that in a series of over 3,000 operations on the thyroid gland he had encountered postoperative tetany but once. The patient presented only mild symptoms of the disease.

the stretcher. The opposite ends of the sheets are drawn over the patient, so that the patient is ensheathed by the two sheets, the ends of which lie on the stretcher. Two persons standing at the opposite side of the stretcher from the operating-table catch the ends of these sheets and by comparatively little effort draw the patient quickly, gently and safely on the stretcher. When the bed is reached, the leaf of the stretcher is placed on the bed and the patient drawn carefully and easily from the stretcher to the bed.

By this method there is no lifting and no danger of dropping the patient between table and stretcher, provided the leaf is pushed far enough over on the table. It seems less crude than the methods in common use.

Jenkins Arcade Building.

TYPHOID VACCINATION AND THE WIDAL REACTION

WITH REPORT OF A CASE WHICH FAILED TO SHOW A POSITIVE WIDAL AFTER THREE SUCCESSIVE VACCINATIONS

AUGUSTUS MAVERICK, M.D.
SAN ANTONIO, TEX.

In vaccinating against small-pox the important question which arises is: "Did the vaccination take?" Now that typhoid vaccination is becoming more and more popular in civil life it is just as important for the physician to know whether his subjects really become immune to typhoid or not, for if his vaccine has been kept on the druggist's shelf for a couple of years or a faulty thermostat in the manufacturer's laboratory has caused it to be overheated, he may vaccinate with it by the bucketful without results. The individual may be happy who thinks he is protected from typhoid, but is not, and who drinks his polluted water without a tremor, but his position is not one to be envied.

In vaccinating a large body of people, as a whole army, where the vaccine has already proved good and the conditions always remain the same, it would be troublesome and useless to determine whether each member showed a positive result, but in ordinary practice at the present time where so many outside factors may influence the value of the vaccine, the physician is not deserving of his patient's confidence who does not make a point of determining the results in each case. In this country the vaccine prepared by the Army Medical School is taken as the standard, since it has been so thoroughly tried, but the vaccines now sold by the leading manufacturing houses are in no way inferior. The physician who obtains his vaccine fresh, direct from one of these houses, is safe, but if he depends on what his druggist supplies him he might be disappointed. Typhoid vaccine, as prepared at present with heat to kill the bacilli, keeps very poorly; it should never be used a year after its preparation and by preference not after three months. The best vaccines sold now have the date after which they should not be used stamped on the package, but under the very unfavorable conditions often found in the general drug market even this date may sometimes prove too long.

Small-pox or cow-pox being an exanthematous disease, the success of a vaccination is readily determined by inspection of the skin lesion, but typhoid being mainly a bacteriemia, the results of the vaccination are to be expected chiefly in the blood. The local and general symptoms experienced by the subject after inoculation with typhoid vaccine cannot be used as an index. The majority suffer practically no general reaction and the local skin area need show but little disturbance. Vincent,[1] of the school of military hygiene at Val-de-Grâce, France, prepared a vaccine without the use of heat by autolysis of living typhoid bacilli in physiologic salt solution, the injection of which produced very energetic bactericidal properties of the blood and only a little or no local and no general discomfort. An increase in the bactericidal elements of the blood-serum following vaccination against typhoid was pointed out by Pfeifer and Kolle, in 1896, and since then by numerous other observers, this increase being more marked and constant than that conferred by an attack of typhoid. Bacteriolysis is well marked, although the bacteriolytic tests are too unsatisfactory for general use. The serum has also been demonstrated to contain an antibody which gives the usual complement fixation test seen in typhoid itself. Determination of the opsonic index after vaccination shows a decided increase in the opsonins. Major Russell[2] prefers as more satisfactory Neufelt's method of estimating the power of phagocytosis and found an increase in the phagocytic titer to be well marked and constant, reaching its height at the end of three or four weeks, when it was one to six thousand times as high as that of normal blood. Recently Albert and Mendenhall[3] have demonstrated an increase in the number of leukocytes immediately following inoculation of the vaccine, there being a polymorphonuclear neutrophil and large mononuclear leukocytosis, the increase in the large mononuclears being characteristic of typhoid. Typhoid precipitins are also found unusually abundant after vaccination.[4]

The blood test by which the practicing physician is to decide whether his vaccine gave good results or not is the Widal reaction, the power of the serum to agglutinate the bacillus of Eberth. Pfeifer and Kolle, Chantemesse,[5] Castellini,[6] Trigalia and Mozznoli,[7] Spooner,[8] Russell,[2] Sappington,[9] and other writers have called attention to the presence of the Widal reaction after inoculation of typhoid vaccine. Semple[10] has shown that the agglutinins are equally abundant whether the vaccine has been given subcutaneously or intramuscularly. Courmont and Rochaix[11] have succeeded in obtaining a positive Widal following the administration of the vaccine by high intestinal injections, although the reaction was never well marked. They also succeeded in obtaining a positive Widal following ingestion of the vaccine, but the results varied a great deal and were by no means satisfactory. The Widal reaction ordinarily becomes positive in five to ten days after the first dose of vaccine and grows stronger with the second and third doses; it reaches its height in ten to thirty days following the last inoculation, when, according to Major Russell,[2] it "is often present in dilutions of 1 to 5,000 and occasionally the serum develops a titer of 1 to 10,000 or even 1 to 20,000; only rarely does it fail to exceed 1 in 500 or 600." The reaction gradually weakens, but has been reported as persistent at the end of one and two years.

1. Bull. de l'Acad. de Méd., June 21, 1910.
2. Boston Med. and Surg. Jour., Jan. 5, 1911.
3. Am. Jour. Med. Sc., February, 1912.
4. Ricketts and Dick: Infection, Immunity and Serum Therapy, Ed. 2, 1911.
5. Bull. de l'Acad. de Méd., Dec. 7, 1909.
6. Centralbl. f. Bakteriol., Oct. 18, 1909.
7. Riv. Crit. di Clin. Med., 1909, No. 40 (quoted in Mulford's Bulletin).
8. Boston Med. and Surg. Jour., 1910, clxxii, 37.
9. Jour. Med. Research, June, 1910.
10. Lancet, June 25, 1910.
11. Presse méd., June 3, 1911.

V. 58
1912

This, as we know, is a much more powerful action of the blood antagonistic to the typhoid bacillus than we would expect following an attack of typhoid. According to Austin and Frothingham,[12] "the agglutinating power of the serum in typhoid usually reaches its height in about the third or fourth week, when a positive reaction may be obtained in as high a dilution of serum as 1 to 800, but as a rule not over 250." Van der Velde[4] is said to have reported a typhoid serum which was agglutinating in a dilution of 1 to 1,000,000, but such instances must be extremely rare. In typhoid we seldom meet a positive Widal during the first week; at the end of the second week, 70 to 80 per cent. of the cases show this reaction. In a few well-marked cases of typhoid the Widal fails to appear. In such instances it may be only temporarily absent, for it varies from day to day in strength; "it may be thirty times as strong one day as the next and may even disappear entirely for a day or two." In other cases the failure to obtain a satisfactory reaction is explained by the bacilli used in the test belonging to a different strain from that causing the disease. Some cases of typhoid are caused by a strain of bacilli which are agglutinated with difficulty and these are found to leave the blood-serum of the victim very poor in agglutinins. Sometimes the blood of a typhoid patient fails to show a positive Widal in the ordinary strengths, but gives a positive reaction when well diluted. This paradox is explained by the presence of agglutinoids, here called proagglutinoids, which have a stronger affinity for agglutinogen (the bacterial element of agglutination) than has the agglutinin (the blood element); when the serum is diluted the concentration of the proagglutinoids becomes less and at a time when they are so dilute that they have no influence on the reaction the agglutinins are still present in such quantity that agglutination is brought about. Agglutinins do not kill the bacilli but merely clump them together, so that they may be more readily taken up by the phagocytes.[4] A serum may be bactericidal, though not agglutinating, but in typhoid the presence of agglutinins is such a characteristic feature that if they remain absent we would ordinarily hardly expect to find other antibacterial elements. If the above causes are eliminated, as far as possible, there still remain three or four cases out of every hundred which, for no apparent reason at all, fail to give a satisfactory Widal (agglutination in dilutions of serum under 1 to 40 or 50 can hardly be called satisfactory).

The presence of so many more antibodies in the blood of those vaccinated against typhoid than among those made immune by an attack of the disease would indicate a greater rarity in the absence of the Widal reaction after vaccination. To date authorities have been unanimous in finding a positive Widal after typhoid vaccination and the reliability of the test for this purpose has become fixed. In Circular 4 from the office of the surgeon-general the statement is made that "the Widal reaction is always positive after typhoid prophylaxis; it appears in about ten days after the first dose and remains positive for six months to a year." The large number of serums examined to date (1912), in the Army Medical School from vaccinated individuals have invariably shown a positive Widal.[13] Since, however, the factors which give rise to agglutinins in artificial immunization are the same as in natural immunization it would be plausible to believe that a negative Widal might occur after typhoid vaccination, no matter how very rare this might be. That this is actually possible is shown by the following case:

G. H., male, white, aged 16, was inoculated on May 25, 1911, with 500 million typhoid bacilli, the vaccine being obtained from a local druggist. The injection was made subcutaneously near the angle of the left scapula. On June 6 a second dose of one billion bacilli was administered, and on June 19 a third dose of one billion. No general symptoms followed the inoculations and the site of injection showed very moderate soreness and little redness and swelling. Five days following the last dose a Widal was made and proved negative. Dilution 1 to 50 showed lessened motion of the bacilli and no clumping; dilution 1 to 100, slightly lessened motion and no clumping. The vaccine used was manufactured by the H. K. Mulford Co. and it was thought that possibly its age was responsible for the negative results obtained (Mulford at that time did not date their vaccines as they now do). This was also the opinion of Dr. A. Parker Hitchens, director of the Mulford Biological Laboratories, who was kind enough to communicate with me on the subject. He suggested repeating the vaccination with a vaccine known to be fresh.

On September 22 the patient was submitted to another series of inoculations, the material being supplied by Dr. Hitchens himself. On that date, the patient received 500 million typhoid bacilli; on October 2 and 12, one billion each. General symptoms were absent; the local reaction was moderate, although after the first dose the subject complained of "soreness of the whole arm and shoulder" throughout the next day. The week following the last dose a Widal test was made and again proved negative. Dilution 1 to 50 showed lessened motion of the bacilli and no clumping except a slight tendency for a few groups of three or four bacilli to agglutinate around the edges of the hang-drop; dilution 1 to 100 showed lessened motion and no clumping. The lessened motion was a little more marked than after the first vaccination and the faint tendency to agglutination was absent altogether the first time. At the request of Dr. Hitchens, samples of blood collected in glass capsules, on November 1, were sent to him. His examination, which was most thorough, may be quoted in full.

"Dilution of serum made in test-tubes, normal saline solution being used as diluent.

"Following are the dilutions of the serum: 1 : 10, 1 : 20, 1 : 40, 1 : 80, 1 : 160, 1 : 320, 1 : 640.

"Serum obtained from immunized horse was used for positive control in dilutions made in same manner. Following are the dilutions of positive control serum: 1 to 200, 1 to 400, 1 to 800, 1 to 1600, 1 to 3200, 1 to 6400.

"Equal amounts of typhoid bacteria suspension (strain-Dorset) added to the dilutions. One test-tube containing suspension alone used as negative control.

"All test-tubes incubated at 37 C. for two hours. At the end of which time the tubes were taken out of the incubator and hanging-drop slides prepared and examined. Three microscopes were used simultaneously, one for the positive test showing undoubted agglutination, one for the negative test and one for the test with the serum under question. Motility and clumping were looked for in all three preparations.

"Immobilization and clumping were noticed in the positive serum in all the dilutions and in the serum under examination in dilution of 1 to 40; next dilution 1 to 80 being free from clumps and bacilli motile.

"Test kept in dark at room temperature over night and results read macroscopically next morning. Complete agglutination found at that time all through the dilutions of positive serum, no agglutination in the negative control.

"Serum under question showed sediment up to dilution 1 to 40, supernatant fluid being cloudy."

In summing up his results Dr. Hitchens wrote:

We can only confirm your own findings—we got a fairly unsatisfactory agglutination at 1 to 40 but not above this

12. Arch. Int. Med., December, 1910, p. 717.
13. Means, A. W. W.: Vaccination Against Typhoid in the United States Army, Am. Jour. Med. Sc., March, 1912.

point. We gave one tube of the blood to one of our friends in another laboratory and the report is the same.

Dr. Hitchens expressed himself unwilling to say whether the patient was immune to typhoid or not, saying:

> We know there are persons who do not react to other substances, and we know that the same is true of the lower animals. We frequently have horses that refuse to show the presence of even a few units of antitoxin, even after weeks of severe treatment with toxin. I do not know that it has ever occurred to anybody to attempt to infect these animals to determine whether or not they are immune.

The same preparation of vaccine as used on the patient for his second series of inoculations was at the same time given to four of his brothers. Each one of the four showed a very strong Widal. This proved to my satisfaction that the vaccine used was not at fault. It also went to show that whatever the peculiarity might be in this individual's serum it was apparently not a family peculiarity. All possible causes of a negative Widal in typhoid were considered. The effect of dilution (up to 1 : 640) was to make the test further from positive and this fact eliminated the possibility of proagglutinoids. That a difference in strains between the bacilli used in making the Widal and those used in the preparation of the vaccine could be responsible for the negative results was also out of the question since the Widal was made by Dr. Hitchens with the same growth of bacilli as used to prepare the vaccine, and in addition my own growth of bacilli were agglutinated by the blood of the patient's brothers who received the same vaccine. The patient's blood was examined at seven different intervals while he was under observation and this should be enough to exclude the idea that a temporary absence of agglutinins (as may occur in typhoid fever) was responsible for the negative results.

Since the patient was perfectly willing, it was next decided to try one more vaccination with vaccine from another source. Through the courtesy of Dr. Hitchens a typhoid vaccine was obtained from a most reliable source (which I am not at liberty to name). Only two inoculations were given, each of one billion bacilli, on January 10 and 23 respectively. Neither caused any general symptoms, the first produced quite a little local discomfort, the second very little. A Widal test was made before the first dose was given and differed in no way from those preceding. Another Widal was made the week following the last dose, in dilution 1 to 50, and showed lessened motion (somewhat more pronounced than before) and no agglutination except a slight tendency (more than before) in certain parts of the field. With motion of bacilli noticeably lessened and a slight tendency to agglutination, the Widal might be called suspicious but not fairly positive.

The effect of each vaccination on the blood of this person was evidently to produce very moderate increase in agglutinins and it is plausible to believe that continued inoculations in time would have produced a good Widal reaction. The question which most concerned the patient in this case, and the most important question after all, is, have the vaccinations made him immune to typhoid? The scarcity of agglutinins is strongly against an acquired immunity. No examinations were made for other antibacterial elements in the blood; of all such products in serum immune to typhoid infection the presence of agglutinins would certainly be expected first. A Widal which is persistently, not temporarily, absent or weak in typhoid has long been recognized as a bad prognostic sign, and as most commonly seen in fatal cases. This would lead one to believe that an absent or weak Widal after typhoid vaccination is suggestive of little resistance to typhoid infection and an unusually severe attack if infection should occur. On the other hand, if an individual is vaccinated against small-pox and the vaccination is not successful we say that he is already immune (provided, of course, that we are sure of our technic and vaccine). The fundamental principles in typhoid and small-pox vaccination are, of course, different. But it would seem that a person very susceptible to typhoid would show well-marked toxic symptoms following absorption of the vaccine, as has been pointed out by Sir W. B. Leishman. Therefore, if this patient has such a susceptibility, why were no toxic symptoms produced? A case illustrating a hypersensitiveness to typhoid infection is recorded by Captain Williams,[13] as follows:

> A man who had typhoid in 1899 was inoculated [with typhoid vaccine] in June, 1909, receiving two doses, the first of these produced a moderate reaction, while an exceptionally severe one followed the second. In March, 1910, he had a mild attack of typhoid. The conclusion seems warranted that in this case we have an instance of individual hypersensitiveness to typhoid infection.

It is the common experience of all who have had much to do with vaccination against typhoid that persons who have had an attack of typhoid fever usually show marked symptoms after vaccination. This certainly seems rather peculiar when we realize that those who have once had typhoid very rarely suffer a second attack and are ordinarily protected for life against reinfection. All these facts only add to the difficulty in answering the question: Is this patient immune or hypersensitive to typhoid infection?

V. 58
1912

NOTES ON OTHER CASES

Typhoid vaccination in general practice differs in many respects from similar vaccination in the army, where conditions remain more uniform. During the past year I have performed seventeen vaccinations against typhoid; in all but one instance examination of the blood was made following the last inoculation and of these all showed a positive Widal reaction except the case recorded. Care was taken to obtain the vaccine fresh as needed, direct from the manufacturers (Mulford). No bad effects were produced in any case. There was nearly always a well-marked local reaction—redness, swelling, tenseness and itching of the skin—of short duration. General symptoms were practically absent in all cases except two. The patients were two young married women. One suffered after each inoculation from malaise, headache, dizziness, nausea and feverishness of moderate severity. The other had similar symptoms after the first dose and ten days later refused another inoculation. A Widal at this time was made and proved decidedly negative and the patient finally consented to take the other two doses by the mouth. No symptoms of any kind resulted from this method of administration, but following the last dose a positive Widal was found in dilution 1 to 50, although not well marked in 1 to 100. The first patient was nursing a 9-months-old baby at the time and remarked that the child became "pale and fretful" the day after each of the last two inoculations. It was thought that possibly the child might have obtained enough agglutinins through the mother's milk to appear in the blood-serum or have absorbed enough toxins to produce agglutinins of her own, but,

although the mother showed a strong Widal, the child's blood was absolutely negative.

Four of my patients were under 13 years of age and my limited experience agrees with that in general, which states that children are apt to show less disturbance from typhoid vaccine than are adults. My youngest patient was a girl of 7 who experienced practically no subjective symptoms at all, local or general, after each inoculation (full dose), and whose blood showed a strong Widal ten days after the last dose.

Experience has taught that ten days is the most suitable interval to observe between inoculations. One or two days more or less, however, can make no difference, but a longer interval is to be preferred to a shorter one. When pressed for time it is well to know that an interval of only a few days may be used, although not as satisfactory. One of my patients who was leaving the city on short notice received his inoculations at five-day intervals and his blood developed a good reaction.

It makes little difference what part of the body surface is used for inoculation provided absorption at that point is good. The arm, back, buttock, thigh, abdomen or chest may all be used, but the operator usually comes back to the left arm at the insertion of the deltoid as the handiest place of all. Persons vaccinated in the arm complain of being bumped against in a crowd; others vaccinated about the body cannot wear their clothes with ease; those inoculated in the back say they cannot lean back in a chair, and those vaccinated in the buttock fuss about not being able to sit down — if the leg is chosen they are still able to "kick."

507 Bedell Building.

A METHOD OF OUTLINING THE THYROID GLAND

MALCOLM S. WOODBURY, M.D.
Resident Physician, Clifton Springs Sanitarium
CLIFTON SPRINGS, N. Y.

The large number of clear-cut cases of thyroid disease, together with the very common instances of neurotic states, and of circulatory derangements (especially those of so-called "nervous heart") very evidently dependent on faulty thyroid activity, force one to the opinion that dysthyroidism is of very frequent occurrence.

This being the case, any diagnostic method which will be of aid in thyroid examination is of some importance.

I have examined many cases in which I thought the thyroid to be normal in size and after examination have questioned myself as to whether I had actually succeeded in my examination or whether I was simply satisfied with finding no obvious enlargement, without really accurately outlining the gland. I venture to say that this has been, at times, the experience of every man who makes the thyroid region, as every conscientious examiner must, an important field in every routine physical examination.

The accurate manual examination of the normal thyroid is not easy and in many cases is impossible by the methods usually employed. Having seen and felt moderate thyroid enlargements brought into much greater prominence by strong extension of the neck, a support being placed under the neck (that is, by the usual position employed in partial thyroidectomy) I became convinced that in all examinations of the thyroid this position should be assumed, but being firmly persuaded of the great importance of proper thyroid examination I decided to work out the problem on the cadaver, to make my previous conviction as near a certainty as possible. These investigations, coupled with many subsequent examinations of patients, have radically changed my preconceived view of the matter.

The principal structures which interfere with manual examination of the thyroid are the sternomastoid muscles; and of very much less importance the sternothyroid and sternohyoid muscles.

The examiner, on grasping his patient's throat in the usual manner and instructing him to swallow, is not infrequently confused in his findings as the sternomastoid border slips under his fingers. It is rather surprising to one who forms his idea of thyroid anatomy largely by the appearance seen during the operation for goiter, to find how almost completely the normal thyroid is hidden beneath the belly of the sternomastoids. In the specimen studied by me, from the body of a medium-sized, thin but fairly muscular man, the head being in erect position, the entire lower pole of the thyroid and the upper pole except a very narrow margin (less than 0.5 cm. at its widest point) were covered by the sternomastoid. The gland in this specimen would be considered normal in size, the longest dimensions of the lobe being 5 cm. by 2 cm. by 1 cm. The gland was practically symmetrical and a discussion of one lobe will serve for both. With head erect it was found that the lower pole was only 2 cm. above the head of the clavicle and was completely covered by the sternomastoid. On flexion of the neck, the tip of the lower pole descended to a point 0.5 cm. behind the head of the clavicle, and incidentally, behind the attachment of the sternomastoid to the clavicle. It also descended at least 0.5 cm. away from the surface and on inserting the finger under the sternomastoid I found that the lobe could very easily be pressed backward another 0.5 cm. before it rested firmly on its bed.

With the neck in extension the tip of the lower pole occupied a position 2.5 cm. above (cephalad to) the head of the clavicle, and on pressure with the finger, was 1 to 1.5 cm. nearer the surface than when similar pressure was made, the neck being flexed. The anatomic reason for this change of position of the lobe seems to be, in part, the fact that it occupies a position over the fifth, sixth and seventh cervical vertebræ, that is, over the "down-hill" portion of the cervical vertebral convexity; having no bony attachments it descends with the larynx and trachea (with which it is in contact and to which it is attached by fibrous trabeculæ) when the neck is flexed, and ascends when the neck is extended, the distance of the lower pole from the surface varying as it is pushed farther down the "vertebral hill" in flexion of the neck, or is drawn up on to the top of the "vertebral hill" in extension.

With the neck flexed I was unable to outline the lower pole through the sternomastoid and obviously so near the point of its attachment the muscle could not be retracted to advantage. On the other hand, in firm extension of the neck the lower pole could be outlined through the sternomastoid, though not with entire satisfaction, as the sternomastoid was on the stretch and could not be easily retracted, and being tense, it was not entirely easy to feel through it; though firm, deep pressure gave fairly satisfactory results. Endeavoring to improve on this position for examination of the lower pole I continued the strong extension of the neck and rotated the chin until it was nearly over the opposite shoulder. This so rotated the larynx and trachea on their long axes that the lower pole of the thyroid lobe

lay almost above (cephalad to) the suprasternal notch (a region incidentally, which in thyroid surgery I have sometimes called the anatomic soap-box, as it very conveniently lends itself to this use in the scrub-up). In this position the inner border of the lower pole which was hidden ¾ cm. under the sternomastoid with the neck in extension, and 1.5 cm. with the neck in flexion, came out from under the sternomastoid and lay 0.5 cm. internal to it and almost directly above the suprasternal notch, the tip of the lower pole being 3 cm. above the head of the clavicle. The whole lower pole could be outlined with the head in this position, but the border of the sternomastoid still caused some confusion. I then found that, with the head in the above-described position, if the side of the head were slightly flexed on the chest so that the sternomastoid attachments were made to approach each other somewhat, that the muscle was released from tension and the finger could very easily be inserted under its border and could readily outline the entire lower pole.

In this position the upper pole could also be fairly well outlined, its inner border being 0.25 to 0.5 cm. internal to the inner border of the sternomastoid. I found, however, that the most satisfactory position for examination of the upper pole was moderate flexion of the neck without rotation. Simple extension in outlining the upper pole is of practically no value as the upper pole is already at the "top of the vertebral hill" and extension (which is of so great aid in the exposure of goiter in the operative field) in the normal neck, does not carry the belly of the sternomastoid backward far enough to make more than 0.25 cm. difference in the exposure of the upper pole and renders the muscles too tense to be readily retracted or felt through. Flexion, on the other hand, relaxes the sternomastoid muscles which are then so easily retracted with the finger that the entire pole can be easily outlined. So that by combining the maneuvers described, the entire lobe can be outlined with entire satisfaction. Examination of the thyroid isthmus requires no special position.

These procedures have been tried on many patients and I believe that the thyroid gland can be measured with a fair degree of accuracy in the great majority, if not in all cases. I am at present in the habit of measuring the lobes at the time of each complete physical examination. In many instances, for the complete outlining and measuring of either lobe, the maneuver described for the examination of the lower pole will serve perfectly.

It is needless to say that the "firm but delicate" touch is essential. The gland, however, has a feel which distinguishes it from the other structures and very fortunately the anatomy of the sternothyroid and sternohyoid muscles is such that they cause very little confusion in palpating the gland. As in the usual method of examination of the thyroid, the movements of the gland on swallowing are an aid. It is important that the patient's head should be held by the examiner or his assistant, not by the patient's own effort, as this involves unnecessary muscle tension. Many patients, on being told to relax the sternomastoid, after the head has been brought into the proper position, are able to do so very satisfactorily.

One other point, which I cannot conclude without emphasizing, is this: Every physical examination should include careful auscultation over the four thyroid arteries just as surely as it should include auscultation of the heart and lungs. I see, every year, several patients who do not show much thyroid enlargement, but who do show symptoms very suggestive of hyperthyroidism and in whom conclusive evidence is found in the distinct bruit heard over one or more of the thyroid arteries. The location of the bruit is, of course, over the region of the superior and inferior poles of the lobes of the gland.

TOXEMIA AND ECLAMPSIA IN THE NEW-BORN BABE

EFFA V. DAVIS, M.D.
CHICAGO

Why pregnant women are at times attacked with eclampsia with fatal results in a large percentage of cases is still an unsolved problem. It is believed that something goes wrong with the chemistry of the blood in such patients — that a toxic material is elaborated which finally produces signs and symptoms that point toward, if they do not terminate in, active convulsions.

Such women, whether they have active eclampsia or not, bear children more or less affected by their mothers' morbid condition. We find on studying these toxic or eclamptic women that their children show varying degrees of affliction, some dying *in utero* with a resulting abortion or early still-birth, while others go to term and are born in an enfeebled or asphyxiated condition, which results in still-births at term or death shortly after birth from apparent inanition. Still others, whose mothers have gone on to convulsions, partake of the same serious degree of the disease and are attacked with convulsions also. Such infants usually succumb early or within a few hours after birth.

There are other instances in which the mother has been known to be toxic, but has escaped a climax of eclampsia, but the child after birth has continued toxic and finally developed convulsions and died. The seizures come on suddenly and nearly always result fatally.

A certain number of infants born of toxic mothers, however, recover completely, and no marked disturbances are noticed. These babies no doubt inherit strong resisting power from the paternal side and resist the disease more vigorously than others. Infants often do well though born of women who have a few hours later themselves died of eclampsia.

Rarely, if ever, do these infants fail to show some signs of their mothers' affection, however. Most of them show a marked icterus, a slight rise of temperature during the first few days after birth, dull, sleepy or feeble behavior when placed at the breast and a relatively large initial loss of weight. Frequently they are fretful, colicky babies, with poor digestive power; they gain slowly on their mothers' milk and easily become marasmic on artificial feeding.

If they survive the care of the obstetrician, they go to make up the vast number of weaklings that the pediatrician is called on to treat later. During the obstetrician's service they contribute a moderately large class of sudden and unaccountable deaths in the new-born and not a few of the otherwise unaccountable still-births. They, I believe, account for the class of babies that suffer with icterus neonatorum and unaccountable sudden high temperatures not due to infections of the digestive tract by careless handling, and to the class of infants that develop convulsions and suddenly die in the first two weeks of life.

I believe that in almost every instance such a toxemia in the mother extends to her child and may be the cause of its death even two or three weeks, if not longer, after

V. 58
1912

birth. It is proper to use the term "toxemia of pregnancy in the mother" as a cause of death in the infant in these cases instead of leaning on the common, overworked excuse of "gastro-enteritis" as the only possible cause of death in an infant dying of convulsions shortly after birth with its head uninjured by instrumental delivery or prolonged, difficult labor.

I feel that it is worth while to call attention to these cases because I believe that a certain few can be relieved and that their lives even may be saved by an early recognition of the possibility of the condition and by measures taken promptly after birth to secure elimination through the bowels and kidneys.

I have some faith in the use of small divided doses of calomel and bicarbonate of soda, with an initial dose of castor oil, and plenty of sterile water to flush out the kidneys. I believe that it is a mistake to put the child early to the mother's breast in these cases. I favor weak infusions of fennel or chamomile with a little sugar for a few days; and if the temperature rises I give a little sweet spirits of niter, 2 or 3 drops, for a dose or two till the excretion of urine is established. I advise the employment of a healthy wet-nurse, when possible, with colostrum still present in her milk, rather than its own mother's breast. Small doses of calomel seem to do the most for these infants, but it must be given with care and overdosing avoided, as hemorrhages from the bowels and stomach are not uncommon. Warm baths and care in keeping the child's body warm are of the utmost importance, as in adults suffering from the same trouble.

Whether the milk of the toxic mother contains detrimental elements is still a question, but from clinical observation, I am of the opinion that it does, as the infants so often show indigestion and colic after the flow of breast-milk is established. Possibly the condition described as the "three months' colic" of young nursing infants may be due to the presence in the mother's milk of some toxic ingredient, which the already somewhat toxic babe cannot throw off, producing colicky indigestion, or the sudden and fatal convulsion that may come on directly after nursing, as has happened in my experience.

As a key to the possible type of infant to be looked for from these toxic women we can divide the mothers into two classes.

First and most unpromising are the women who show on physical examination a poor physique and who have a bad family history, often revealing intemperance, goiter, asthma, tuberculosis or a line of short-lived ancestors dying of heart or kidney lesions—in short, a degenerate type, and what the life-insurance companies would term a "poor risk." The progeny of such mothers is most susceptible to toxemias of pregnancy though the child may survive if the mother does not go as far as an eclamptic attack before its birth, and the case does not result in an abortion before the child is viable.

The second class is much more promising, and is composed of mothers who primarily possess a good physique, present a good family history and would be counted good life risks, but who have acquired luxurious habits and have embarrassed their elimination by idleness, overeating and lack of fresh air.

Women of these two types are more apt to be afflicted with a toxemia that may prove dangerous to themselves than the woman who has a damaged kidney from some other cause, or, in other words, a true nephritis. Such a woman is more liable to abort early and remain free from eclampsia, never carrying a child to term.

The following are, briefly, the histories of twelve cases taken from my hospital records and case books to illustrate the points I have tried to make. They do not represent all the cases I have noticed, especially among the milder types. I regret that my notes on all my cases have not been accurate enough to enable me to give the percentage of frequency of occurrence in the regular routine of my work.

Other authors have reported instances of eclampsia in babes born of eclamptic mothers, but the literature does not contain much on the effects of the milder toxemia of the mother on her infant. I hope that this recitation of cases will stimulate observation along that line. Being convinced of the harm done to the unborn, physicians will more frequently recognize such mild toxic cases and treat them properly.

The first five cases in the series are infants whose mothers suffered with toxemia of pregnancy to the degree of having eclampsia. In the two cases in which eclampsia occurred after delivery the infants survived, while in the three mothers who had convulsions before or just at the time of delivery the three infants all died.

The next two patients (Cases 6 and 7) are children of mothers who were markedly toxic but escaped eclampsia; the infants, however, both developed convulsions and died on the third and fourth days.

The last five cases are of milder types of toxemia in which neither mothers nor babes suffered eclampsia, but both alike showed illness due to the toxic state of the mothers.

CASE 1.—An old primipara, aged 38, with poor physique, suffered from extreme condition of toxemia, headaches, nausea, vomiting and edema of limbs, face and finally entire body. She was delivered prematurely of twin girls of 3½ and 5 pounds each. She had an eclamptic seizure eight hours after delivery, being very profoundly affected with six convulsions. The condition yielded to treatment and the mother recovered. The infants were not nursed by her and were feeble and icteric, the smaller dying at four months of what seemed to be a toxic condition following the ingestion of some certified milk which made ill all the babies in the nursery where it was used. The larger twin lived to be adopted but developed a glaucoma, which was pronounced congenital by Dr. Francis, and was afflicted with malnutrition and subject to convulsions many times during its first and second years, when it passed from observation.

CASE 2.—A multipara, aged 35, was seen for the first time in convulsions. The child, which weighed 6 pounds, was delivered after seven seizures, the woman being in a delirious and semi-unconscious state. The infant showed signs of profound toxemia, being almost at once seized with feeble convulsions, and died in five hours. The mother recovered.

CASE 3.—A primipara, aged 25, was under observation about three weeks. She showed mild toxic signs; no albumin in urine. The first stage of labor was prolonged and painful, lasting twenty-four hours. There was a sudden attack of eclampsia in the second stage. Easy forceps extraction of child was performed, with short and but partial anesthesia of mother, who had but one convulsion but remained unconscious for several hours. The infant began to show convulsive seizures directly it was born and lived but twenty-four hours. The mother recovered promptly.

CASE 4.—An infant girl, weight 3 pounds, was admitted to nursery on third day of life after being delivered by cesarean section from mother who died the following day in a near-by hospital in convulsions with history of toxemia. The infant was given little but sweetened water for the first five days and later did well on cow's milk. The only sign of toxic trouble was in the profound icterus which came on shortly after birth and did not clear up for three or four weeks.

CASE 5.—A primipara, aged 17, whose family history showed intemperance and goiter, was permitted to drink beer

during pregnancy. There was a history of an attack of measles in early pregnancy. The patient had a well-developed goiter; showed some edema of limbs, with slight amount of albumin in the urine. She was seized with severe convulsions in second stage of labor, head on perineum after short easy first stage. The infant was extracted by forceps almost instantly. It was not asphyxiated, crying promptly but feebly. It weighed 7½ pounds. The respiration was feeble and heart rapid. No convulsions were noticed but the child's condition became weaker and weaker till death occurred at the end of three hours. The mother was profoundly affected but made good progress after the first twenty-four hours, albumin disappearing from urine within three weeks.

CASE 6.—A Polish multipara with contracted pelvis, seen for the first time in labor, was delivered under chloroform anesthesia by cesarean section in Rock Island Hospital. Signs of toxemia were present; edema of limbs, albumin in urine. The child was born asphyxiated, respiration being established with difficulty. It weighed about 9 pounds. On the third day it was seized with a convulsion and died. The mother's recovery was uneventful.

CASE 7.—A young primipara of the obese type, with a chronic gonorrhea, had a well-marked toxemia, headaches, nausea, vomiting and edema of lower limbs. No albumin was noticed. Treatment was given for four weeks preceding delivery. Labor was short and easy. The infant, which weighed over 7 pounds, seemed normal and was put to the mother's breasts regularly. It did not receive much milk until the third and fourth days, when it obtained a good supply. On the evening of the fourth day it went into a severe convulsion and died about one hour after nursing.

CASE 8.—A primipara, aged 28, with poor physique, entered hospital in labor at eighth month; she had had no previous care. She showed edema of face and lower limbs, urine contained abundance of albumin. Normal easy delivery of an eight-months baby girl, weight 4 pounds. The infant was feeble and sluggish; it was very difficult to teach it to nurse. It was given breast-milk from a normal wet-nurse, the first week, and was later nursed by mother. It grew into a delicate child with frequent fits of illness.

CASE 9.—A woman, aged 25, in her first pregnancy showed mild toxemia. The infant, born at term, showed inability to thrive on mother's milk; the stools were green and curdy, and an extreme colicky state occurred after each nursing. All trouble ceased after the child was put on artificial food. The second pregnancy occurred four years later accompanied by extreme toxemia. There was no albumin, but pernicious vomiting to a degree that threatened the safety of both mother and child. With vigorous treatment the case went to term. The infant began to show the same disturbance when nursed as her sister had done. An exchange of babies was made by employing a healthy wet-nurse with an older baby. Both babies did well under this treatment and the toxic mother was given her own child to nurse after a period of two weeks with good results. She nursed the child successfully for about six months, when supplemental feeding was required. In about three years a third pregnancy resulted in such profound pernicious vomiting that gestation was interrupted in the fourth month to save the life of the mother.

CASE 10.—A primipara, aged 35 years, whose family history was poor, showed mild toxic signs during the last two months of pregnancy. She had chronic gonorrhea. The infant, weighing over 8 pounds, was born after short easy labor. It developed hemorrhages from the bowels on three occasions in first week of life and showed marked icterus and great loss in weight. It was taken from the mother's breasts at the end of two weeks after severe attacks of colic and loss in weight. The child made poor progress on artificial feeding and showed signs of marasmus at 4 months.

CASE 11.—A primipara, aged 17, whose family history was poor, manifested toxemia by edema, loss of appetite, headaches, etc. There was no albumin. The child was born after short easy labor at term; it weigned 6 pounds. It was asphyxiated and revived with difficulty. Old clots showed that partial separation of the placenta had been present for several days. The infant was profoundly jaundiced after a few days and was generally feeble and delicate. Its condition improved promptly after being taken from the breast and carefully fed on cow's milk.

CASE 12.—A multipara, aged 33, was seen for the first time in labor. There was a history of kidney trouble. She showed great edema of limbs. There was sluggish uterine contraction. The forceps was applied for inertia after fourteen hours of feeble effort on the mother's part. The infant weighed 10 pounds. There was no asphyxiation. Old clots expelled with the placenta showed early partial separation. The infant developed jaundice early and temperature rose to 102.5 on the fifth day. It was taken off its mother's milk, given mild doses of calomel and soda and the milk of a healthy wet-nurse for a short time. The mother was treated with calomel and salines for some time and later sent home nursing her baby after its condition showed improvement.

2314 North Clark Street.

RECENT ADVANCES IN THE TREATMENT OF PULMONARY TUBERCULOSIS BY AIR, FOOD AND REST*

LAWRASON BROWN, M.D.
TRUDEAU, N. Y.

The last half of the nineteenth century saw the institution of the fresh-air treatment of pulmonary tuberculosis, which in the first decade of this century has been extended to the treatment of many other diseases, including nervous and mental disorders, pneumonia and certain digestive disturbances. We know that fresh air is of great benefit in pulmonary tuberculosis, but even yet some of us have not fully realized that fresh air benefits patients with other forms of tuberculosis as much as it does those with the respiratory type. It is, then, safe to say that fresh air exerts no more influence on the lungs than on the rest of the body. A further fact bearing on this point is the unpleasant symptoms that many persons experience when confined in a close or stuffy atmosphere and forced to breathe "ruminated" air. It is almost needless to enumerate these symptoms—at first headache, drowsiness, lassitude, malaise, nausea, faintness, vertigo; later digestive and nervous disturbances, followed by malnutrition, secondary anemia and lessened resistance to infectious diseases. It is of considerable interest to recall the symptoms of mountain sickness experienced in very high altitudes (15,000 feet): headache, intense drowsiness, lassitude, nausea or even vomiting, fainting, vertigo and further palpitation of the heart, throbbing of the arteries and shortness of breath.

It would seem very reasonable, therefore, to infer that lack of oxygen in the latter case was the cause of the disturbance, and arguing by analogy it would appear most probable that lack of oxygen was the disturbing factor in the former. Such certainly was long a current belief. The increased percentage of the CO_2 has been held by some to be the chief cause, while others have believed that "crowd-poison" was the essential factor. The existence of "crowd-poison" has been questioned, but Rosenau and Amoss have proved beyond doubt, by the anaphylactic reaction, the presence of protein bodies in the exhaled air.

Are these, then, the deleterious substances that weaken resistance to and lessen chances of recovery from pulmonary tuberculosis when the patient fails to get fresh air? Ingenious experiments have been devised to help

* Read at the Annual Meeting of the New York Medical Society, April 17, 1912.

V. 58
1912

answer this question. Several healthy men have been confined in small cabinets and made to rebreathe a small amount of air. The percentage of oxygen quickly fell and that of carbon dioxid rose greatly. The organic matter, which apparently bears some relation to the percentage of carbon dioxid, must also have risen. The individuals all became very uncomfortable and finally ceased to talk. An electric fan inside the cabinet was then set in motion and great relief was experienced, even though the composition of the air remained unaltered. In another experiment, the individual within the cabinet was allowed to breathe fresh air without, however, experiencing any relief. Still again, a person outside the cabinet was permitted to breathe only the air within the cabinet and suffered no ill effects. These and other careful observations have led to the conclusions that coolness, dryness and active motion of the air are factors to be sought after and further, as James puts it, that "many atmospheres are good enough to be breathed which are not good enough to be lived in."

The temperature of the air plays an important rôle in health and disease. Recent inquiries concerning certain mill operatives in Connecticut have shown that men working on piece work accomplished more when there was a marked change in the atmospheric temperature, even from cooler to warmer conditions. As a rule the more vigorous races live in climates where the cold, though pronounced, is not severe enough to limit the production of good crops. The custom of sending young and vigorous patients to climates with equable temperature has long since been abandoned. An average diurnal variation of at least 20° F. is one requisite of a good health resort for tuberculous patients. Sudden changes for vigorous patients act like a tonic and are to be desired when intelligently met. This is a feature of the winter climate in Arizona where a marked change occurs each night at sunset. The weight curve of healthy and tuberculous individuals bears this out. In 1,200 patients at the Adirondack Cottage Sanitarium I found that the weight began to increase in August and continued to do so until Christmas. It then remained stationary or decreased slightly to Easter, after which it fell steadily to August. A marked change of temperature is usually noticed in the Adirondacks in August and early September and the diurnal variations are great. I might add that this is probably the normal weight curve. Nearly every tuberculous patient has a more or less deranged nervous system. Like cold tubs in typhoid, cold air in pulmonary tuberculosis is a great nervous sedative, for it abstracts heat, especially when in motion. Too intense or too prolonged cold, however, overstimulates some. It has long been a current belief in Saranac Lake that one hour of driving is worth two of sitting on the porch. Who can say that, beside the psychic influence, the rapid change of air about the body may not be greatly beneficial? Unquestionably the exhilaration of coasting and of automobiling may in part at least be explained in this way. In any case, to active motion of the air with the attendant evaporation of moisture from the surfaces of the body is to be ascribed much of the sensation of well-being experienced with good ventilation. It requires only slight movement of the air to increase markedly the loss of heat from the body. In cold climates this must be met by heat-production, by muscular contractions, which, when the patient is at rest, are involuntary, but greatly raise the muscular tone.

The dryness of the atmosphere, that is, the degree of humidity relative and absolute, plays an important part, but can be largely offset by motion of the atmosphere. Mere dryness is of little avail, for nearly every home in America, especially in winter, has an atmosphere containing far too little moisture — in fact, far less than is to be found in the deserts of Egypt or Arizona. The really important point is the amount of moisture that can be absorbed by the atmosphere from the surface of our bodies, and this depends on the humidity of the air, its temperature and most of all on its movement.

This brings us to the consideration of a few practical points in the fresh-air treatment of pulmonary tuberculosis. It might seem wholly insufficient, from what I have said, for a patient to be in bed with his head out of a window. In reality it is not so, but, in my opinion, it is far less effective than the full air bath. Spraying the upper part of the trunk with cold water in typhoid fever is certainly not so efficient as a complete sponge, but does some good. So with the window tent. It must not be lost sight of, however, that the room in which the body remains needs very careful ventilation.

A question that must be decided frequently is whether the roof or the back yard is the best place in which to take the fresh-air treatment. I do not hesitate to say that the roof should be used in every instance, where possible, for several important reasons. The number of bacteria, the quantity of dust and the temperature of the air decrease directly with the elevation above the street, while the movement of the air increases. This leads to fewer secondary infections and to less irritation of the respiratory tract, and subjects the body to a far better hygienic environment. In summer, however, the roof may be too warm.

These newer ideas about fresh air throw grave doubts on the efficacy of "air carriers" and emphasize the necessity of life in the open, "living" air. My experience, after observing patients for ten years, does not lead me to believe that sleeping out of doors materially hastens recovery, provided eight to ten hours a day are spent in the open air and the night passed in a well-ventilated room. When, on the other hand, the patient returns to his indoor work, then sleeping out is very necessary. Ozone is said never to occur in rooms, however well ventilated, but it is of no value to man except as an indicator of the purity of atmosphere.

A man out of doors is said to be exposed to 100 times more fresh air than he could get in the best-ventilated room in any given period of time. In any room bacteria are partially protected, while in the open they quickly die.

GOOD FOOD

"Eat once for yourself, once to gain weight and once for the germs," is another way of stating that suralimentation is of importance in the treatment of tuberculosis. But just how important is suralimentation? What are we striving for? We saw that life in a poorly ventilated atmosphere had a deleterious effect on the digestion and ultimately reduced the resistance to infectious diseases. The environment in which patients with pulmonary tuberculosis were treated twenty-five years ago made it almost impossible for them to escape the effects of an ill-ventilated atmosphere. Their appetites suffered and they could not eat. It was but natural, then, that along with fresh air, food, good in quality and great in quantity, should also be insisted on. That day, however, has now passed and any layman that does not know that fresh air and good food constitute the best treatment for pulmonary tuberculosis is indeed unobservant or crassly ignorant. What, indeed, are the

purposes of this good food? Is it enough to keep the patient in nitrogen equilibrium or does he require more, and, if so, how much more? Of what should his diet, roughly speaking, consist? These and many other problems have received much attention during the past decade and it is of great interest and value to round up our new knowledge on these points. Given a patient without fever and without (serious) complications, the scales are the best criterion of the diet.

I know of no better simile than the gasoline engine. The efficiency of the engine is the work it can accomplish on the road. Give it too much gasoline and the combustion is incomplete, the spark-plugs become dirty, the cylinders coated with carbon and the efficiency is greatly reduced. In other words, the engine does far better work when supplied with only enough gasoline to produce the best result.

So, too, with the tuberculous patient. Give him what he can use, but reduce his diet to the lowest point at which he will gain the required amount of weight. The tuberculous patient with an early lesion is often about ten to fifteen pounds below what he should weigh for his height and age. We should, I believe, aim to bring this patient up to and slightly beyond this weight, which is often ten pounds above what he has usually weighed. We should not try to do this, however, by too rapid gains, too forced feeding, which but too often defeats its very purpose. We should be satisfied with a gain of a pound a week and a digestive system in fine order. Now when the required weight is attained let the diet be reduced to the lowest point which will give satisfaction at the table and sustain the weight. This reduces to a minimum the quantity of waste which the excretory organs must take care of, makes out of many patients very different individuals and reduces greatly gastro-intestinal disturbances.

You may ask me for details as how best to accomplish this. Here arises the question of individuality which is really of the greatest importance. My first advice to such a patient is gradually to quit taking milk and to eat only three meals a day. These meals should gradually be made to approximate what he must eat in the future. Fats are more easily taken in sufficient quantities than proteins or carbohydrates, but popular knowledge so emphasizes the importance of proteins that it is more necessary to push the carbohydrates.

In the majority of patients beginning treatment for the first time, such directions smooth the course of recovery from the disease. In some, however, the digestive functions have never been very active and these patients must be coaxed and wheedled into eating an amount sufficient for their needs. Here we must have frequent days of rest, when the diet is somewhat reduced. The greatest objection to sanatorium treatment is the difficulty experienced in individualizing the diet. I cannot to-day, however, go into details of how to treat digestive disorders. In closing this section of my paper, I might add that my advice to patients is as follows: "Eat as little as you can in order to gain, but you must gain this number of pounds. When you reach that weight, eat less still and just enough to maintain your weight, avoiding milk. You will have little upsets, little flare-ups of the disease, during which you will lose weight. Then the milk, which you have cut out of your dietary when you have gained enough, should be replaced and will enable you to regain quickly the pounds you have lost. It is not the amount you eat but what you assimilate that is important."

REST AND EXERCISE

Too much body fat is no aid in combating an infectious disease and when the weight reaches the mark set, then another problem enters, which I shall now discuss. I refer to exercise. By inference one will conclude that up to this time the patient has been at rest. Generally speaking, the weight, temperature and pulse should be normal before any exercise is permitted. Recently two schools have sprung into prominence, one advocating absolute rest, the other maintaining that the only way to lose the cough and expectoration is by carefully regulated exercise which produces efficient auto-inoculation, a sine qua non of recovery. One advises that the patient's trousers be hid, for then one knows where the patient is; the other says that the muscles must be hardened from the first in order to achieve results. If we weigh these opinions we see that while danger lurks in the first, grave risk is associated with the second. While rest may be employed in any home, the system of auto-inoculation can be efficiently and safely carried on only in an institution where the physician in charge is well and believes thoroughly in the system. Many have attempted it and some have come to grief. My advice is to beware of auto-inoculation unless one stands ready to do nothing but work alongside one's patients. This is obviously impossible for most of us.

In any case, rest is imperative for many patients for some time; and those who advocate auto-inoculation through strenuous exercise believe firmly also in rest. In fact, some believe in rest so absolute that the patient with fever is not allowed to stir from his bed — he can neither read nor go to the toilet. He is fed, bathed and treated as a patient ill with typhoid fever would be. This absolute rest is prescribed to prevent auto-inoculation and when it can be carried out intelligently and faithfully may reduce a temperature that has long resisted all other treatment.

But let us say the temperature has reached normal; what should be the next step? It is here that the two camps are divided, for one would, as I say, hide the trousers, the other assist the patient to don them.

In regard to auto-inoculation, I confess it is a great temptation to all sanatorium authorities to push it. The big, husky fellows, the robust, buxom lassies, that sit about on porches or stroll around taking their exercise, possess much potential energy that it is a great pity to lose. This alone is a strong argument in its favor, but, to make it a success, there are certain requirements that are difficult to obtain. As I have said, I believe that to achieve the best success, the physician must be well and strong and willing to work with the patients if necessary. In an institution it is very difficult to carry on other forms of treatment, but this can be overcome. Excessive auto-inoculation must be met by absolute rest, and few institutions have a nursing staff large enough to give the patients proper treatment. A certain number of patients fail to improve under this line of treatment and some feel that they have been injured. This, however, can be disregarded when due care has been exercised. Another unfortunate thing is the fact that even in the Adirondacks it is often too hot in the middle of the day for patients to work in the garden or fields. Crops mature and need to be reaped. The patients for one reason or another may not, without serious injury to their chances for recovery, be able to garner them. Shall the crops be lost or the patients injured? Such a problem is not infrequent. While it

V. 58 1912

may not be perfectly fair to compare the results obtained in a sanatorium in England with those obtained in one in America, the comparison affords some interest. The results of such a comparison between the figures published by Paterson at Frimley, the birthplace of auto-inoculation, and those at the Adirondack Cottage Sanitarium, where a certain number received tuberculin treatment, seem to indicate that the permanent results may be better among the patients discharged from the latter institution. In any case, I believe that the treatment by auto-inoculation in pulmonary tuberculosis fraught with grave peril and I confess that I hesitate to use it.

How to be happy in bed is a problem difficult of solution for many men, and to attempt to keep a patient in bed who is fuming and chafing under the restraint when his temperature is normal and he feels well is, I think, useless. I do believe we have overlooked the value of rest of the lungs in pulmonary tuberculosis — rest which, I might add, can be obtained with any degree of success only when the patient is in bed. We know that a tuberculous spine needs fixation, that a tuberculous hip needs absolute rest, that a tuberculous knee or wrist used ever so little fails to improve. What aim has the treatment of pulmonary tuberculosis by induced pneumothorax other than limiting the function of the lung and putting it as nearly at rest as possible? I believe that the day is coming when by this means and by other operative interference we shall prolong the life and usefulness of many patients who to-day have but a few months of dreary, useless and hopeless existence ahead of them. I have known two patients, one with a broken leg, the other with a tuberculous ankle, make pulmonary recoveries only when absolute rest in bed had become necessary on account of the complication. For these reasons I have come to believe that a patient with an early lesion and any elevation of temperature should remain in bed for some time. Nor do I always limit it to patients who have a rise of temperature, for rest in bed will help the cough and expectoration more in many cases than any form of treatment. Digestive disturbances are often more readily combated when to the treatment is added rest in bed. One must of course use discretion, for not all patients can be so treated. When by rest in bed the temperature has fallen to normal and the question of getting up arises, I often inform the patient that the period of most rapid gain is from the time his temperature becomes normal to the time he begins to get up and to use his energy otherwise than for combating the disease. This, for many, makes the bed a little softer resting-place. When such a patient is doing well, I frequently allow him to go for drives or boat rides, or even, when this is begun gradually, to exercise by walking. On his return he goes at once to bed on a porch where he lives and takes all his meals except in cold weather. At first, these liberties should be permitted only on every other day, and the following day should be spent in bed. It is surprising what patients can accomplish who devote their whole time to resting and working.

When the patient knows that at a certain date he must return to work, if I consider such a step at all possible, I endeavor to fit him for his future work. At the Adirondack Cottage Sanitarium we have found our workshop of the greatest help in training the patients' muscles for their future activities. We teach them that unless they can do more work, take more exercise than is required by their future occupation and withal stand it well, it is folly to think of returning to work. For clerks, bookkeepers, mechanics, physicians, nurses and many others, we find suitable, useful forms of exercise, which we prescribe, not with the idea of auto-inoculation, but with the idea of producing tolerance to the amount of exercise necessary to their various callings. The patients enter into it heartily and I believe for us, at least, the results are far more satisfactory than what we could obtain by auto-inoculation.

Rest in bed is essential in all early cases for some time as well as for any patient who is not doing well. Rest harms few patients even when carried on longer than necessary. Exercise is often fraught with danger and must be prescribed as carefully as arsenic or strychnin, for an overdose is not less deadly.

Had I to begin treatment to-day for tuberculosis, knowing what I do, however little it may be, I would go to bed and remain there for two months, whether symptoms were present or absent. Such, I feel, is the importance of rest at the beginning of treatment.

THE OCCURRENCE OF A POSITIVE WASSERMANN REACTION IN CASES OF LEAD-POISONING *

CYRUS W. FIELD, M.D.
NEW YORK

During the past year the routine Wassermann examinations in Bellevue Hospital have shown a number of cases of lead-poisoning giving a positive reaction; and for this reason we desire to call attention to the fact, though its occurrence has been noted incidentally before.

We have had twelve cases of lead-poisoning in which the blood had been sent into the laboratory for a Wassermann test,[1] and of these twelve, eight were positive and four negative. Of these eight positive cases, only one gave a history of ever having contracted syphilis and in that case it was thirty years previously and the patient claimed never to have had any secondaries or tertiary lesions. His wife had had one miscarriage. Another of the eight patients had a very suggestive specific history. A woman, aged 46, a domestic, gave a history of having had one child and at least five miscarriages, but denied all venereal history. She was evidently very susceptible to lead-poisoning, for she had an attack five years previously (after painting some furniture, according to her own statement), suffering at that time from marked wrist-drop. No recent history of exposure to lead could be made out, but she presented at this time a slight double wrist-drop, abdominal pain, lead line on the lower gums and her blood showed marked granular basophilia of the erythrocytes.

In one other case no history could be obtained, as the patient entered the hospital in a semi-comatose condition and died shortly after. He was a solder-caster by trade and died of cerebral hemorrhage. His red cells showed marked granular basophilia and the anatomic diagnosis at autopsy was as follows: cerebral hemorrhage, right lenticular artery, with rupture into lateral ventricles;

* From the Pathological Laboratory Bellevue Hospital, New York City.

1. The technic of the Wassermann reaction used in this series is as follows: A 5 per cent. solution of sheep red cells and amboceptor obtained from rabbits and as antigen, the acetone-insoluble fraction of lipoids obtained by extracting syphilitic fetal livers with alcohol, taking up in ether and then precipitating with the acetone. This is redissolved again in ether and reprecipitated. The precipitate is then dissolved in Merck's methyl alcohol. The amount of this used is 0.01 c.c. The patient's serum is tested to see whether it contains any natural amboceptor for sheep-cells and this is taken into consideration when the hemolysin is added. It is needless to say that all tests are controlled. The quantities are one-half those used in the original Wassermann technic.

lobular pneumonia (right and left); serofibrinous pleuritis; healed apical tuberculosis; hypertrophy left ventricle; chronic valvulitis, aortic and mitral; chronic aortitis; chronic interstitial nephritis; chronic interstitial splenitis; nutmeg liver; otitis media, right, purulent.

In the other five cases there are no signs or symptoms in any way referable to a specific lesion, all being typical cases of lead-poisoning. All the patients denied any venereal disease, but all five showed a positive Wassermann reaction. None of these came to autopsy, all having been discharged from the hospital improved after treatment with potassium iodid, strychnin and catharsis.

The four negative cases were all cases of chronic lead-poisoning occurring in painters. Syphilitic infection was admitted by one of these with secondary manifestations forty years ago, but he had since had no symptoms referable to syphilis. None of them could be called alcoholic in any way. One of these patients died and came to autopsy, the anatomic diagnosis being: lobular pneumonia, right upper lobe; tuberculous pleuritis, left; chronic pulmonary tuberculosis, left upper; chronic interstitial nephritis; fatty and cirrhotic liver; chronic interstitial pancreatitis; interstitial thyroiditis; chronic aortitis; chronic gastritis; chronic pharyngitis and laryngitis with acute edema; calculi of seminal vesicles; pial edema.

In the literature there are a few cases of lead-poisoning which have been reported with positive Wassermanns, but we cannot find that the condition has been considered as a possible source of error in interpreting the Wassermann reaction. Of course, it would be impossible to say, from the few cases here reported, that the positive reaction was brought about by the lead-poisoning, for it may be that cases of lead-poisoning are more apt to give a positive Wassermann with an old syphilitic lesion than are others; and owing to the fact that not all the cases of lead-poisoning that entered the hospital were examined for the Wassermann reaction, it would be improper to consider our series as showing the correct proportion of cases of lead-poisoning giving positive Wassermanns. It will probably be found to be lower when more cases are examined.

Another point which would be well worth observing, but which we have been unable to do in any of our cases so far, is to see what effect an injection of salvarsan or mercury, or both combined, might have on the Wassermann reaction.

In conclusion, we cannot at the present time accept a positive Wassermann reaction in a case of lead-poisoning as proving a specific infection, and, on the other hand, we cannot ignore its presence. Until many more observations are made and much experimental work has been done, it will be best to simply keep this fact in mind in interpreting positive reactions in persons exposed to lead.

A SIMPLE STAIN FOR THE SPIROCHÆTA PALLIDA *

RUTH TUNNICLIFF, M.D.
CHICAGO

In studying cultures of *Spirochæta pallida*, for which I am indebted to Dr. H. Noguchi, I have found that the organism stains readily, usually in two or three seconds, with a 10 per cent. mixture of a saturated alcoholic gentian-violet solution in 5 per cent. phenol. The smears may be fixed in the flame, although no fixation is really necessary. The stain is also useful for staining fresh material and for phagocytic experiments. A very thin smear is essential for obtaining a satisfactory stain of fresh material. For phagocytic experiments, the stain is left on about three minutes; the smear should not be fixed by heat; after washing and drying, the leukocytes are stained with Leishman's or some other suitable stain. According to Koessler,[1] the stain is satisfactory for staining *Spirochæta pallida* in experiments with spermatozoa as carriers of infectious agents. After I had found that this was a useful stain for the spirochete, I discovered that it had been used previously for staining the spirochetes by Oppenheimer and Sachs,[2] and by Ploeger,[3] but on account of the simplicity of the method and because it is little known, it was thought advisable to publish this note.

* From the Memorial Institute for Infectious Diseases.

1. Tr. Chicago Path. Soc., 1912, viii, 280.
2. Deutsch. med. Wchnschr., 1905, xxxi, 1156.
3. München. med. Wchnschr., 1905, lii, 1381.

TRANSPLANTABLE TUMORS OF THE FOWL: A NEGLECTED MATERIAL FOR CANCER RESEARCH *

PEYTON ROUS, M.D., JAMES B. MURPHY, M.D., AND W. H. TYTLER, M.D.
NEW YORK

The recognition that neoplasms exist in many species of animals throughout the vertebrate world has given to the tumor problem a broader biologic significance. And at first glance it appears strange that so few animal forms have been utilized for experimental cancer research. Attention has centered on the new growths of the rat and mouse, on a peculiar round-celled tumor of the dog, transmissible by coitus, a dubious tumor of wild hares, endemic in certain portions of Germany, and on a thyroid growth of fishes, the exact nature of which is still under dispute. There exist good reasons for this limitation. The animal employed for tumor work must be available in quantity and capable of thriving under laboratory conditions; and its "spontaneous" growths must be transplantable. True tumors are rare in cats, rabbits and guinea-pigs, and, while more frequent in dogs, are difficult to study because of the number of individuals which must be employed and the frequent necessity that all shall be of one age and breed.

Some two years ago one of us transplanted a spindle-celled sarcoma of the fowl, a very typical neoplasm, metastasizing by means of its cells, and in other ways regulated by their peculiarities. The growth has since been observed in twenty-seven series of fowls. Recently it has been successfully transmitted by the Berkefeld filtrate of an extract of the fresh tissue in Ringer's solution[1] and by the dried or glycerinized tumor-tissue. These results have led us to a study of other chicken-tumors. Work with them has not yet advanced to tests for an extraneous causative agent; but it has disclosed the presence in chickens of an abundant material well adapted for cancer research. From a single firm selling live poultry in New York we have acquired during the past seven months twenty-seven chicken-tumors, a number greater than this institute was able to obtain of mouse-tumors from all sources in the course of three

* From the Laboratories of the Rockefeller Institute for Medical Research.

1. Rous, Peyton: Jour. Exper. Med., 1910, xii, 696; 1911, xiii, 397; THE JOURNAL A. M. A., 1910, lv, 1805; 1911, lvi, 198. Rous, P., and Murphy, James B.: Jour. Exper. Med., 1912, xv, 119, 270.

V. 58
1912

years.[2] Furthermore, the avian growths were encountered in a relatively unfavorable stock, young for the most part and supposedly healthy.

The existence of tumors of the fowl has been demonstrated by the work of several investigators.[3] The variety of growths is much greater than among rats and mice. We have been especially struck with the frequency of benign tumors. Among 353 primary neoplasms of the mouse, Haaland[4] found but three which may be termed benign — a melanoma, a mixed tumor and a fibromyoma uteri. There were 344 carcinomas and six sarcomas.[5] But among our first twenty chicken-tumors were a large, characteristic lipoma, a pure myxoma and several stationary growths, made up of blood, or lymph-sinuses and lymphoid tissue, which are perhaps best looked on as nevi. Of malignant tumors there were an osteosarcoma with large blood-sinuses, from one of which the fowl bled to death at operation, numerous round-celled tumors, a connective-tissue growth producing cartilage and bone, three spindle-celled sarcomas, a fibrosarcoma and an epithelioma. Previous observers have noted sarcomata and carcinomata in about equal proportions. But they have dealt in large part with autopsy material and with growths primary in the viscera; whereas our records have to do with tumors superficially situated, and for this reason come to hand during the life of the host.

Small bits of each spontaneous growth were removed at operation and transplanted by means of a trochar. The selection of a vascular site for the grafts has much importance. Usually they were placed deep in the pectoral muscle. The normal fowls taken as hosts were young, and of the same variety as the chicken with the spontaneous growth. The general failure to transplant avian growths is certainly attributable, in part, to lack of observance of such points.[6]

Many attempts were made to transplant the first tumors obtained, quite irrespective of the indications afforded by their histologic appearance. More recently, taught by negative results, we have resorted to preliminary autotransplantations, and have tried to propagate further only such growths as proved autotransplantable, or were found micoscopically to be malignant.

On much of the work it is too early to report. But thus far two new tumors have been successfully transferred to other hosts. One of these, a connective-tissue growth forming cartilage and bone, is noteworthy, because in the original host it appeared to arise as a symmetrical developmental anomaly connected with the sternum. It is now in its fifth "tumor-generation." The other growth is a spindle-celled sarcoma which had its primary seat amid the muscles of the upper leg, but metastasized to the neck and gizzard. It is now growing rapidly in a large proportion of the fowls constituting the second "tumor-generation" (second consecutive series inoculated).

Of special interest is the question as to whether our spindle-celled sarcoma with a filterable cause would be found to be epidemic among chickens. But it has not even been encountered. True, several spindle-celled sarcomas have been observed, including one that is transplantable. But each has its distinguishing histologic features. There remains the possibility, nevertheless, that these various growths may have a common cause, a point which we hope to investigate in the near future.

Sixty-Sixth Street and Avenue A.

2. Jobling, J. W.: Monographs of the Rockefeller Institute for Medical Research, 1910, No. 1, p. 81.
3. Ehrenreich and Michaelis, Tyzzer, Wernicke.
4. Haaland, M.: Fourth Scientific Report of the Imperial Cancer Research Fund, 1911, p. 1.
5. Haaland excluded from these figures thirty of the lung-adenomas peculiar to mice and twenty-one lymphomas because of uncertainty as to their significance.
6. Rous: Note 1. From a recent publication (Verhandl. d. Japan. patholog. Gesellsch., 1911, p. 114) it appears that A. Fujinami and K. Inamoto reported in Osaka, in 1910, their success in transplanting a myxoma of the fowl. They make no mention of the influence of variety of the host on the success of transplantation.

ANOTHER TONSIL-FORCEPS; ONE OF THE OPERATIVE DIFFICULTIES REMOVED

GEORGE PAULL MARQUIS, A.M., M.D., CHICAGO

It is with some hesitation that I present anything on the very voluminous subject of the tonsil, but after several years of effort I think I have worked out an instrument which will simplify the operation for those who use the snare for the final removal of the tonsil.

Many forceps models have been devised for seizing the tonsil and holding it firmly while it is being dissected from its bed, but in nearly all the objection has been that, after the dissection has been made, the forceps must be removed and passed through the snare loop and the tonsil again grasped. In this procedure it is very rare that the gland can be seized in exactly the same position so that when one is prepared

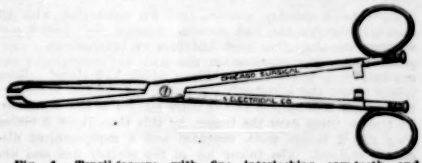


Fig. 1.—Tonsil-forceps with fine interlocking saw-teeth and movable handles.

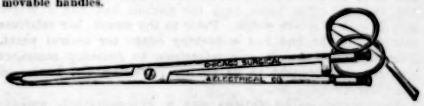


Fig. 2.—Snare wire being passed over the handles of the forceps after one ring has been bent on the other.

to close the snare over it, it does not come out from its fossa free from the surrounding structures as it did when the dissection was apparently completed, and one is again obliged to resume the dissection before tightening the snare.

Then too the oftener one grasps a tonsil in the forceps and lets go, the more apt the forceps is to pull out and greatly increase the difficulty of a clean enucleation. The forceps which I wish to show possesses two distinct advantages.

1. It seizes and holds the tonsil securely and will not pull out.

2. It will allow the snare loop to be passed over the handles.

The grasping surface is composed of very fine saw-teeth which interlock. These teeth meet with a curve toward the forceps and away from the tonsil, so that traction on the forceps serves to make it seize the tonsil more firmly, instead of tending to pull out as in most forceps. The grasping surface is set on the forceps at an angle of about 15 or 20 degrees so that when the tonsil is seized the forceps can be held at the opposite corner of the mouth and still the entire surface of the forceps will be permitted to come into contact with the tonsil, and thus to obtain a firm hold on the gland instead of a partial one with only the corner of the forceps.

The greatest advantage, however, is in the movable handles. Each ring fits over a tooth-joint and is held in place by a spring, which is retained by a small screw nut. Being on a thread, this nut can be removed at any time should it be necessary to insert a new spring.

Figure 2 shows the snare wire being passed over the handles after one ring has been bent on the other. I find it much easier to bend the lower ring upward and then pass the snare from above downward.

Both rings are movable, allowing the forceps to be used on either tonsil.

I have used the forceps in a large number of cases and am convinced of its value for these reasons:

1. It allows a firm hold of the tonsil.

2. It grasps with its entire surface instead of a corner and is less liable to pull out.

3. A good hold of the tonsil, having once been obtained, can be maintained until the gland is removed.

4. It is not necessary to dispense with the finger rings and this allows a firmer hold on the forceps.

31 North State Street.

HEMATURIA FROM TUBERCULOSIS OF A PATENT URACHUS. OPERATION FOLLOWED BY SEPTIC RASH. RECOVERY*

HERMAN E. PEARSE, M.D., AND EDWIN LEE MILLER, A.B., M.D.,
KANSAS CITY, MO.

The following case is reported because of its rarity, and the evidence it affords of one more cause of hematuria, and one more rare tumor of the abdominal wall to be reckoned with.

Patient.—A country woman, aged 26, unmarried, with no unusual history, had had measles, mumps and chicken-pox without sequelæ. One aunt had died of tuberculosis. Four years before the examination she had a discharging sinus one-half inch below the umbilicus which had closed. Four weeks before the examination a small, red, tender, inflammatory tumor was noticed at the inner margin of the umbilicus. In two or three days the tumor, by this time about 3 inches long and 2 inches wide, ruptured and a mucopurulent discharge escaped. The tumor lay in the median line and did not seem to be very tender; at least, not so sore as before the rupture. For three days the patient had had a severe coryza with a severe cough. Prior to the coryza, her relatives stated that she had had a hacking cough for several years. The abdominal tumor was refractory to ordinary measures and she was brought to us by her physician, Dr. Taylor of St. Clair County, Mo.

Examination.—The patient was a well-nourished, well-developed woman, weighing about 130 pounds. Temperature 101.2, pulse 110, respirations 26, and blood-pressure 120. The mucous membranes were somewhat pale; the hemoglobin was 75 per cent. White cells were 5,000. Urine negative. The lung findings were normal except for marked dulness at the right apex on peruussion with increased tactile and vocal fremitus and innumerable fine, moist râles, accentuated after voluntary coughing. During the patient's entire stay at the hospital these lung signs never changed, though the coryza had cleared before she left. The sputum was examined five times for tubercle bacilli with negative results. The remainder of the general physical examination was negative.

The abdominal wall presented a diamond-shaped, indurated tumor reaching 2½ inches below the umbilicus in the mid-line. Its breadth at its widest part was about 2 inches. Pressure over the central portion of the tumor expressed a mucopurulent discharge from a sinus near the center of the umbilicus. The edge of the sinus was red and raised, and the skin covering was excoriated within a radius of ½ inch. A probe directed downward met no resistance until beyond the central portion of the tumor. The patient, under observation for eighteen hours, ran a temperature of 101 to 102; pulse 74 to 104; respiration 24 to 30.

With such a history, such lung findings and a tumor in the abdominal wall, a diagnosis of infected tuberculous cyst of the abdominal wall—probably of the urachus—was made and immediate excision was advised.

First Operation.—On October 12, after alcohol-iodin preparation of the skin, the patient was anesthetized and a 5-inch incision beginning to the left of the umbilical sinus was made in the median line past the lower border of the mass. While excising the mass, we opened a cyst cavity. A small amount of the purulent fluid escaped and a hard, foreign body was disclosed. In endeavoring to pass wide of this infected mass and cyst cavity and contents, the abdomen was opened and the intestines immediately guarded by long gauze compresses. The obliterated hypogastric arteries were not observed at this time. The mass was excised and the hard foreign body proved to be a sebaceous accumulation the size of a hen's egg. The pads were removed, the peritoneum closed and the abdominal wall sutured. Drainage was maintained at the upper angle near the umbilicus by a wisp of iodoform gauze.

The patient was taken back to bed in good condition and made a good recovery from the light anesthetic. Twenty-four hours after the operation, the patient complained of a severe pruritus, which became almost unbearable. Her face, neck and chest and the palmar surface of her forearms presented a scarlatiniform erythematous efflorescence. She did not have the red throat, strawberry tongue or characteristic prodromal vomiting of scarlet fever. Nothing we could do relieved the itching. In four days the rash subsided and the affected areas exfoliated. The patient maintained a pyrexia during the four days of the erythema from 100 F. to 104.8 F. and even after desquamation had taken place still showed a temperature of 100.5 F. for three days.

The gauze drain was removed twenty-eight hours after operation. From the drainage opening a serous discharge persisted and required change of dressings two or three times in twenty-four hours. Her urine was measured and recorded and watched for signs of acute nephritis following scarlet fever, but they did not appear. No blood was noticed, microscopically or in gross specimen.

Six days after operation the patient passed markedly bloody urine. Three hours before she had voided normal urine. As she had begun her regular menses, it was suggested that possibly the hematuria was due to menstrual contamination. To eliminate this possible error, Dr. Miller catheterized the patient and found the source of the blood to be the bladder. A later cystoscopic examination by Dr. McCallum showed normal urine from the right and left ureteral orifices and a bloody discharge coming through an opening in the bladder fundus. The margin of the aperture in the fundus was markedly indurated and excoriated. There were several points suggestive of tuberculosis in the bladder mucosa.

A microscopic examination of the urinary sediment showed mainly erythrocytes and a few round cells with quite a few polymorphonuclear cells. No casts were found.

Second Operation.—On the eighth day following first operation, we again opened the abdomen through a mid-incision reaching from the umbilicus to the pubis, opening up the old cavity and extending into the space of Retzius. The wall of the incised cavity was dark and appeared infected. The open end of the patent urachus was found and that organ was excised taking a portion of the mural peritoneum with it down to the fundus of the bladder where the heavy cord-like tubular structure widened and fused into the fundus of the bladder. We were able to express a bloody urine from the distal end of this tube, incised 4 inches above the bladder. We removed the cord and the bladder fundus for an inch on all sides of the opening. The bladder wall was infolded and closed by three layers of catgut sutures. The obliterated hypogastric arteries were now found, then dissected from their peritoneal bed and excised. The peritoneum was closed with chromic gut. A gauze drain was placed down to the bladder fundus and the wound was closed by catgut uniting the layers of fascia. Stay sutures were left to be tied when the drain was removed. Metallic skin clips united the skin. The operation took thirty-five minutes.

Postoperative History.—The patient went back to bed in good condition. The pyrexia still existed. Next day a Widal test was made and found to be negative. She had the same scarlatiniform efflorescence after the second operation as after the first, with a degree increase in her temperature; the same unbearable pruritus again appeared. One day later the drain was removed and stay sutures tied; four days later the rash again desquamated and the itching ceased. Five days later the temperature fell to normal. The skin clips were removed on the fifth day following second operation, with the skin wound healed. Thirteen days from the second operation, she

* Read before Jackson County (Mo.) Medical Society, April 23, 1912

V. 58
1912

was well enough to sit up. The sinus at the umbilicus healed the hematuria never reappeared; the pyrexia subsided. The patient returned home well.

The sinus was recurrent tuberculous as proved by the microscopic sections. The cheesy mass was sebaceous matter often seen in tumors of the urachus. The lung condition we regarded as tuberculous because from the beginning until the patient left the hospital the physical signs never changed over the right apex.

The hematuria was caused by blood oozing through the patent urachus from tuberculous excoriation in that organ. The bladder showed signs of tuberculous infection (Dr. McCallum).

The rash was a septic rash as shown by its duration. It is needless to express the anxiety this rash caused when this patient was an inmate of a surgical hospital ward. It has this peculiarity of sudden onset after each operation. Ether rashes are more evanescent, of shorter duration, usually a few minutes; and rarely have the same distribution. Scarlet fever is not prone to such recurrences.

We believe the condition due to breaking up of the walls of an infected tumor, with a subsequent acute infection. The rapid healing and satisfactory union following the second operation does not satisfactorily support this view point. In summary, this patient showed:

1. Tuberculous infection of a urachus with discharging sinus at umbilicus.
2. Hematuria, patent urachus.
3. Septic rash.
4. Unexplained pyrexia; not typhoid, therefore, either tubercular or septic.
5. All clinical signs of tuberculosis in lung and bladder yet we were never able to substantiate the clinical findings by bacteriologic examination of the discharges from these organs, even though the microscopic sections showed the tumor manifestly tuberculous.

1201 Rialto Building.

A CASE OF GUNSHOT WOUND OF THE PREGNANT UTERUS

A. W. TUCKER, M.D., SHANGHAI, CHINA

History.—The patient, a Chinese woman, aged 26, applied for treatment at St. Luke's Hospital at about 7 a. m., Feb. 4, 1912, complaining of pain in the abdomen and back. February 3 at about 10:30 p. m., while attempting to stop a robber, she had been shot in the abdomen. Her previous history was good; she had two children, both living. The patient was nine months pregnant.

Examination.—The wound of entrance was about 3 inches above and to the left of the umbilicus, through the left rectus, was about ¾ of an inch in length and somewhat ragged in outline. About 3 inches of omentum were protruding from the wound. No wound of exit was found. There was no external bleeding. The skin wound was situated at about the top of the fundus uteri. Abdomen was tender, pulse 126 and rather weak, respiration 28, heart and lungs good.

Operation.—The abdomen was opened through the wound and the omental tag tied and removed. A large amount of blood and clots was found in the abdomen. No wound was found in the intestines. A wound of about an inch in length was found in the anterior part of the fundus of the uterus, a little to the left of the midline. Fresh blood was coming out from the wound in the uterus, but not very rapidly. A cesarean section was decided on. The uterus was opened high, the incision extending from the wound downward. The hemorrhage seemed to be from the placenta, which was situated anteriorly and through which the bullet had passed. The child was delivered and the uterus sewed up; the uterus contracted well. A good deal of clotted blood was found in the pelvis. The abdominal wound was closed with two cigarette drains. The patient became pretty weak during the operation and was given 20 ounces of saline solution intravenously. Pulse at the end of the operation was 140.

Postoperative Course.—The patient did well until midday, when she had somewhat of a collapse, from which she rallied with stimulation. She was given ergot and strychnin hypodermatically and saline by rectum. At 8 a. m. the pulse was 132, temperature 99.4, and her condition was good.

February 5, 8 a. m., pulse was 124, temperature 99.2, and condition good. Lochia was established but scanty. I then remembered that I had forgotten to dilate the cervix, so did so without anesthesia. The lochia then became about normal in amount with some clots. The outer dressing was changed. At 8 p. m. her condition was still good, pulse 130, temperature 99.9. Her condition remained good until 7:30 a. m., February 6, when she suddenly collapsed and died at 9 a. m. I was not able to get a post-mortem. Neither dressing showed a hemorrhage, but I am inclined to think that it was the cause of death.

The child, a girl, started breathing with a little inducement. The bullet, which was of soft lead about ½ inch in diameter and weighted 7 drams, was found to have entered its back over the left scapula and had lodged under the skin near the spine. It was extracted and the wound dressed. The child was doing well on the fourth day, when the family took her home.

New and Nonofficial Remedies

THE FOLLOWING ADDITIONAL ARTICLES HAVE BEEN ACCEPTED BY THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION. THEIR ACCEPTANCE HAS BEEN BASED LARGELY ON EVIDENCE SUPPLIED BY THE MANUFACTURER OR HIS AGENT AND IN PART ON INVESTIGATION MADE BY OR UNDER THE DIRECTION OF THE COUNCIL. CRITICISMS AND CORRECTIONS ARE ASKED FOR TO AID IN THE REVISION OF THE MATTER BEFORE PUBLICATION IN THE BOOK "NEW AND NONOFFICIAL REMEDIES."

THE COUNCIL DESIRES PHYSICIANS TO UNDERSTAND THAT THE ACCEPTANCE OF AN ARTICLE DOES NOT NECESSARILY MEAN A RECOMMENDATION, BUT THAT, SO FAR AS KNOWN, IT COMPLIES WITH THE RULES ADOPTED BY THE COUNCIL.

W. A. PUCKNER, SECRETARY.

CHOLERA VACCINE.—Cholera vaccine consisting of attenuated living vibrios of different virulence has been used with considerable success in India by Haffkine. The living vibrios have been replaced by Kolle by emulsions of killed bacteria and statistics appear to show that this form of vaccine is efficient in the prevention of cholera.

H. K. Mulford Co., Philadelphia.

Cholera Bacterin.—(Cholera vaccine). This bacterin is designed for the purpose of immunizing against cholera.

Cholera-bacterin is marketed in packages of three syringes; syringe 1 is said to contain 500 million killed cholera vibrios, while syringes 2 and 3 each contain 1,000 million killed vibrios.

TYPHOID VACCINE.—

H. K. Mulford Co., Philadelphia.

Typho-Bacterin Mixed.—It is marketed in packages of three syringes; syringe 1 is said to contain 500 million killed *Bacillus typhosus* and 250 million each of *Bacillus paratyphosus* A and B, while syringes 2 and 3 each contain twice the number of killed bacilli contained in syringe 1.

The Duty of Medical Association.—When a young man enters the medical profession he receives as a heritage certain rights, privileges and immunities, which place him at once under obligations to his profession. When he unites with a medical society, he aids in medical organization, he becomes more broad-minded and liberal; it enables him to see his own shortcomings, and also the ability of others. Such association will stimulate him to study and investigate, and he will help to unite, strengthen and elevate his profession. But when a physician selfishly isolates himself from his brother physicians he fails to discharge his obligation to his profession and is bound to get into ruts and become unfitted for the highest discharge of his duties.—J. M. Dampeer, M.D., *Mississippi Med. Monthly*

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

535 DEARBORN AVENUE . . . CHICAGO, ILL.

Cable Address . . . . "Medic, Chicago"

Subscription price . . . . . Five dollars per annum in advance

[For other information see second page following reading matter]

SATURDAY, JUNE 1, 1912

EXPERIMENTAL HYPERTHYROIDISM

The pathologic condition variously designated as Graves' disease, Basedow's disease, or exophthalmic goiter is characterized by certain familiar symptoms which are readily recognized in man. Most conspicuous among these are tachycardia, disturbances of the nervous system characterized by hyperexcitability and exophthalmos, disturbances of the digestive tract accompanied by diarrhea and occasional hemorrhage, and, finally, perversions of nutrition manifested in rapid emaciation, sometimes attended with febrile changes, glycosuria and comparable phenomena. For some time these symptom-complexes in man have been ascribed to a condition of hyperthyroidism; and the overfunctioning of the thyroid has been made responsible for the appearance of the manifestations described.

When the evidence for the validity of the hypersecretion hypothesis is critically examined, the current explanation of the etiology of this disease is far from convincing. Professor Carlson has lately summarized the basis for the prevalent view as follows: (1) structural changes in the thyroids, (2) the effects of partial extirpation of the gland, (3) the aggravation of the symptoms by thyroid administration, and (4) the alleged production of some or all of the symptoms in healthy individuals and experimental animals by thyroid administration.[1] He has pointed out that much of the evidence is as yet a matter of inference rather than of direct demonstration. It is quite plausible that some of these phenomena may be results of altered thyroid behavior rather than an excessive secretion. Furthermore it is by no means clear that some of the cardinal symptoms of exophthalmic goiter are not in reality the secondary effects of a metabolic disturbance rather than the immediate cause of the diseased condition.

Obviously the best proof of the thyroid hypersecretion hypothesis would consist in the possibility of producing the typical manifestations experimentally by administration of thyroid products. This has been attempted by numerous investigators in recent years with most contradictory or inconstant results.[2] Professor Carlson and his Chicago co-workers have again taken up the problems of experimental hyperthyroidism in the hope of contributing some more definite answer to the question of etiology of so-called exophthalmic goiter in man. Heretofore the most constant symptom reported after the long-continued experimental exhibition of thyroid preparations has been tachycardia. An interesting case of apparent production of this disease by hyperthyroidism involves a man who, without the advice of a physician, had consumed about 1,000 thyroid tablets within a few weeks in order to overcome his obesity.[3] He developed the typical picture of the Graves syndrome, with exophthalmos, tachycardia, nervous hyperexcitability, emaciation and glycosuria. The symptoms disappeared again after ten months.

In common with earlier investigators, Carlson reports that toxic symptoms can in all probability be produced in all animals by thyroid feeding. According to him the most constant results in the animal experiments are loss of body weight, gastro-enteritis and diarrhea. In thyroid feeding trials on himself, Carlson noted dizziness, weakness, tachycardia and loss of weight. "In the groups in which the pulse could be recorded with accuracy," Carlson adds, "thyroid feeding in distinctly toxic quantities does not produce tachycardia. Neither does the feeding result in nervousness or exophthalmos in any of the groups. The animals usually retain their appetite and will feed until the gastro-enteritis is extreme or the animal is moribund. In view of our results in so many animal groups it would seem that the records of exophthalmos obtained by previous observers by thyroid feeding are based on errors of judgment, and that the nervousness and tachycardia similarly described are due to some other factors than the thyroid feeding. This is clearly the case in some instances, from the accounts of the experiments given by the authors themselves; for example, in Cunningham's experiments on monkeys. It would require considerable imagination or an undue influence of one's wish or one's judgment to identify the symptom-complex of excessive thyroid feeding in experimental animals with the exophthalmic goiter syndrome in man. The symptoms in experimental animals may or may not be an expression of hyperthyroidism. Other lines of investigation must determine that point. The symptoms are not those of exophthalmic goiter. It would seem that man is very much more susceptible to thyroid feeding than any other species so far subjected to the experiment. Because of this fact and in view of the higher or more delicately balanced nervous organization in man, the expression of hyperthyroidism in man may differ from that in the lower animals. It is therefore clear that the present study contributes nothing to the settlement of the question of etiology of exophthalmic goiter in man, except in so far as it renders untenable the argument from 'experimental hyperthyroidism.'"

1. Carlson, A. J., Rook, J. R., and McKie, J. F.: Experimental Hyperthyroidism in Mammals and Birds, Am. Jour. Physiol., 1912, xxx, 129.
2. Von Fürth, O.: Ergebnisse d. Physiol., 1909, viii, 535.
3. von Notthaft: Ein Fall von artificiellen akutem thyreogenem Morbus Basedow, Centralbl. f. inn. Med., 1898, p. 353.

V. 58
1912

We are far from understanding the interrelationships which unquestionably exist between some of the so-called ductless glands. In this connection, however, it should be recalled that such associations between the thyroid and thymus[4] may be of import in hyperthyroidism in which a hyperplasia of the thymus has been reported to occur. Indeed, the degree of the latter has been directly related to the severity of the Graves manifestations.[5] Such statements are, of course, too fragmentary to serve as a basis for theory-building; but they stimulate to further research.

FEDERAL CONTROL OF VACCINES AND SERUMS

This country is being flooded — and it is the same abroad, but to a less extent—with preparations belonging to the general class of "vaccines, viruses, antitoxins," etc. As many of these bear the label "Licensed by the Treasury Department" or "U. S. Government License No. —" and, for the most part, "Guaranteed under the Food and Drugs Act" in addition, it may be well to remind our readers of the exact meaning of these phrases. The guaranty under the Food and Drugs Act has no meaning at all for the consumer; it simply means that in case of legal difficulty the retail dealer may shift the responsibility to the manufacturer. The most brazen humbugs are "guaranteed" in this way; this phrase has led to much misunderstanding and has undoubtedly greatly increased the confidence, even of intelligent persons, in nostrums.

The "License of the Treasury Department" has a different significance, although it too, is capable of abuse and is being abused. Perhaps the situation will be more intelligible if we review briefly what the license means and what it does not mean.

Several years ago Congress passed a law to regulate the interstate traffic in viruses, serums, etc., the enforcement of which was placed in the hands of the Public Health and Marine-Hospital Service. Under the terms of this act and the regulations for its enforcement all manufacturers, both here and abroad, who desire to manufacture such products for interstate traffic are required to procure a license from the Treasury Department. This license is granted only on the recommendation of the Surgeon-General of the Public Health Service for a period of one year, and only after a thorough inspection of the establishment and examinations of the products themselves. No license can be granted to an establishment which does not have sanitary stables, a properly equipped laboratory and a competent personnel; the establishments are subject to inspection at any time and are required by law to be inspected at least once a year. The license may be revoked on evidence that the establishment is not being properly conducted; as a matter of fact, the licenses of some of the best-known establishments both here and abroad have been revoked or suspended pending improvements.

4. Hoskins, R. G.: Am. Jour. Med. Sc., March, 1911.
5. Gebele: Beitr. z. klin. Chir., 1910, lxx, 20.

The examinations in the Hygienic Laboratory of the Public Health Service of products found on the market as well as those obtained directly from the firms are directed to detecting the presence of living organisms, especially of pathogenic organisms, the presence of tetanus toxin, the control of the strength of the preparations, so far as this is possible, the absence of adulterations, etc. An illustration of the working of the law is the statement from the last annual report of the Public Health Service that, owing to the difficulty of exercising a satisfactory control over foreign establishments manufacturing vaccine virus, the importation of the latter into the United States is now prohibited. This report also cites the fact that experts from the Hygienic Laboratory investigated certain cases of tetanus alleged to have resulted from the use of vaccine virus; the allegations were found to be baseless.

The Hygienic Laboratory, after prolonged investigations, has established official American standards for diphtheria and tetanus antitoxins; all such preparations sold in the United States are required to conform to these standards. Before the establishment of these standards the antitoxins on the American market were extremely variable; in many cases they were worthless. The control of vaccine virus is similarly efficient; before the passage of the law much of the vaccine virus on the market contained large numbers of living bacteria and "sore arms" were common. As the result of this work the United States probably leads the world in the quality of diphtheria and tetanus antitoxins and vaccine virus.

We now come to the dark side of the picture. There are a large number of products of this class the value of which has not been definitely established; there are others of value for which no satisfactory standards are available. To the latter class belong, for example, antimeningococcus serum and tuberculin. The control of the Public Health Service over such products is at present largely limited to an inspection of the factories and an examination of the products to determine their freedom from dangerous contaminations; it is not supposed to go into the theories back of the production of the products or into their clinical value; it can simply require that these products be made in a sanitary manner and that they be free from dangerous impurities.

As a consequence of these limitations there are being extensively advertised a number of products which, in the opinion of many, have little or no therapeutic value; these, however, bear the government license, and physicians employing them should bear in mind exactly what this means. Unfortunately the number of these questionable products seems to be increasing. The difficulty in dealing with them is also increasing, for a number of physicians holding positions in medical colleges, laboratories or sanatoriums are engaging in their manufacture; this is especially the case abroad, but it is becoming the case here also. The fact that the men are associated with institutions of standing inspires more confidence in

the products than would be the case if the latter were made by firms avowedly in business for making money.

What remedies can be suggested for this state of affairs? In the first place physicians should bear in mind that the guaranty under the Food and Drugs Act means absolutely nothing so far as the consumer or user is concerned and that the Treasury Department license may mean almost nothing as to therapeutic value. It is obviously desirable that the Hygienic Laboratory should extend its investigations and prepare standards for other products to which all firms can be held. This is simply a question of an enlarged laboratory and more money. Meanwhile the profession has a right to expect of the Council on Pharmacy and Chemistry, its accredited agency for determining the value of proprietary remedies, the same watchfulness and care as to serums and vaccines as it has exercised with reference to the products of synthetic chemistry. This attention the subject has been already receiving to some extent, but there are indications that the Council will need to go more deeply into the matter in the future. In view of the large number of new vaccines being put before the profession with more or less plausible claims, there is need of painstaking investigation not only as to the products themselves, but also as to their therapeutic value.

LOOKING TWENTY CENTURIES BACKWARD

John R. Early, a discharged federal soldier, went, in August, 1908, from North Carolina to Washington, D. C., to attend to a pension claim on account of malaria contracted in the service. While there he called on a physician for a diagnosis of a skin lesion which was pronounced to be leprosy. Every one knows how Early has since been treated by the American people, his fellow-citizens — quite like any pariah. It was recently reported that "John Early, supposed leper, has been driven out for the last time; and Tacoma, in Washington State, has done the driving out." At first it was intended to fence Early within his acre of land outside Tacoma, thus shutting him from contact with any other person. There were sympathizers with him who petitioned against the idea of that fence. But on the putting in evidence of some passages of Scripture a judge of the superior court refused to issue a restraining order against the erection of the barrier. The national authorities then found a permanent refuge for Early at the Port Townsend quarantine station; and, it is said, "satisfied that he could do no better, he has left the world, and has gone to attend an undoubted leper in that station. His wife and three children will live as near to him as possible," and he will be able to aid them from the small nurse's salary of $65 that a magnanimous government will pay him, $30 pension being added on account, not of leprosy, but of the malaria contracted in the Spanish War.

Now, without entering into the controversy of experts on the subject, for the purposes of argument, let leprosy be presumed in Early. Leprosy is a slowly developing, slightly infectious disease, comparable in many respects to lupus or tuberculosis of the skin. If from the beginning Early's infection had been pronounced a form of tuberculosis, who would have paid the slightest attention to it? Yet the opportunities for the ordinary tuberculous patient to communicate his disease are many times greater than the opportunities for the leper to infect with leprosy, which is communicable only with difficulty.

Possibly leprosy was dangerously infectious in the scriptural days from which the traditional horror surrounding it is largely derived. If so, this characteristic has certainly become greatly modified during the twenty intervening centuries. Moreover, the Biblical leprosy was a congeries of several diseases—leprosy, tuberculosis, scrofula, erythema, eczema, cancer and what not else—all of which passed for leprosy, but which science has since differentiated. How illogical it is, then, to base our twentieth century attitude toward leprosy on its ancient or its medieval status! Leprosy to-day, taken as a whole, is scarcely more terrible in its effects on the individual patient than is syphilis; it is not so swift in its action; it is certainly far less readily communicated, and, therefore, infinitely less dangerous to the community. Our London correspondent says:[1] "There are probably always twenty to thirty cases of leprosy in London." The patients "live at home and move about unrestricted. . . . There appears to be no danger whatever of contagion, for no cases of transmission have come to light." If the enlightened American people must suffer from an epidemic pathophobia, let it be a wholesome and prophylaxis-inducing fear of something really worth dreading—of venereal diseases, for example —infections infinitely more ghastly and harmful to the race than leprosy.

COMPLEXION AND HEALTH IN THE TROPICS

The occupation of regions, like the Philippines, Porto Rico and the Isthmian Canal Zone, where tropical conditions prevail, has brought new problems in relation to the influence of climate on health. The needs which these changes in the new territorial interests of the United States have brought with them, the necessity of introducing troops, workmen and officials into countries where the tropical climate is quite unlike that to which they have been accustomed for generations, raise many questions of serious concern for the welfare of the nation as well as of the individuals involved. The difficulties attending the colonization of the tropics by the white race are familiar facts of history; so that the serious-minded statesman may well pause to consider the prospects of success which our new ventures involve and to inquire whether the

1. THE JOURNAL A. M. A., March 16, 1912, p. 794.

V. 58 1912

obstacles hitherto encountered are insurmountable for white men.

Many of our readers will recall the direful effects of the tropical climate, especially as it manifests itself in the Philippines, which were depicted by Major Woodruff in his widely read book.[1] The theory advocated is that certain deleterious features noted in the tropics are due to the chemical rays of the sunlight; and it was maintained that the pigmented integument of the black races especially protects them from the harmful actinic waves.

The use of all sorts of protective clothing is recommended, a red, orange-red, or black layer being especially suggested. Even tinfoil lining is advocated for the headgear. In addition to ordinary sunburn effects a high incidence of affections of the nervous system, including insanity, is asserted by Woodruff to be particularly likely to occur in the tropics as the result of excessive light stimulation. He also maintains that the blonds suffer more severely than do the brunettes from the deleterious influence of tropical residence, the ill effects of which are mainly due to the large proportion of chemical or ultraviolet rays contained in the tropical sunlight.

Any careful reader of Woodruff's book must have observed the lack of critique which characterized many of his pronouncements. Some of the debatable features of his evidence are presented in a form so convincing and a style so entertaining that the lack of poise in places is readily overlooked. The underlying problem is one of some practical importance in the selection of recruits and governmental employees for our distant possessions.

Major Chamberlain, the president of the U. S. Army Board for the Study of Tropical Diseases as They Exist in the Philippine Islands, has remarked: "The question as to whether transplanted fair-skinned races gradually change after many generations from a lighter to a darker average type, as a result of the survival of those best fitted to endure a high degree of sunlight, is purely speculative and of theoretical interest only. Whether men of dark complexion living ten, twenty, or thirty years in the tropics can withstand the climatic influences more successfully than those having fair skin, light hair and blue eyes is of much practical importance, but is extremely difficult to determine because of the almost insurmountable obstacles which stand in the way of making observations over such a period of time on any considerable group of men. When it comes to the relative resistance of the blonds and the brunettes during the comparatively short tour of duty (two years) which American soldiers commonly serve in the Philippines, the task is beset with fewer difficulties."

Some of the debated problems have already received a satisfactory solution. Phalen's extensive practical experiments for the Army Board[2] failed to show any benefit resulting from the use of orange-red hat linings and underwear. This is, after all, what might be expected. If tanning is due to actinic rays, it is only reasonable to assume that since the ordinary clothing is able to protect the skin from their effects, the same clothing will protect the body as a whole—in other words, that ordinary clothing gives sufficient protection. Indeed, there is as yet no adequate proof that pigmentation *per se* is beneficial in the tropics; and Aron's studies seem to indicate that heat rays rather than the ultraviolet waves are the disturbing elements in tropical sunlight.[3] It is well known that heat and humidity, in the absence of light, can produce symptoms similar to those occurring in milder degree among residents of the tropics.

The Army Board maintains that it is doubtful if the actinic component of the sunlight is a factor in tropical morbidity and deterioration. The elements of possible import in this are manifold. Heat, humidity, sunlight, lack of exercise, disturbed sleep, improper food, bad water, alcoholic and venereal excesses, and above all the characteristic infections of the tropics have been brought forward as alleged causes of the deleterious effect of residence in the tropics. Major Chamberlain of the Army Board has made an extensive investigation of one factor, namely the complexion type.[4] Account was taken of the amount of sickness among the blonds and brunettes in the soldier and constabulary groups, of symptoms referable to climate, of soldiers invalided home, of the military conduct of the two groups, of the comparative incidence of nervous disease in the Army in the Philippines and the United States, and of numerous other statistical relations. A clear summary of the whole matter may be well expressed in Dr. Chamberlain's own words: "In our investigation of blonds and brunettes the evidence was conflicting, some facts being in favor of the fair and others in favor of the dark-complexioned men. This is what would be expected if there were actually no differences between the two types as regards their resistance to tropical influences. From a consideration of all the data it appears that blonds are quite as well able as brunettes to withstand the influences of the Philippine climate for a period of two years and probably for a period of five and one-half years. In case of residence beyond the latter period we are not in a position to express an opinion based on any extensive personal observations." The prospects in the domain of tropical hygiene are far from unfavorable, in Major Chamberlain's judgment.

1. Woodruff, C. E.: Effect of Tropical Sunlight on White Men, New York, 1905.

2. Phalen, J. M.: An Experiment with Orange-Red Underwear, Philippine Jour. Sc., Sec. B, 1910, v, 525.

3. Aron, H.: Investigation on the Action of the Tropical Sun on Men and Animals, Philippine Jour. Sc., Sec. B, 1911, vi, 101.

4. Chamberlain, W. P.: Observations on the Influence of the Philippine Climate on White Men of the Blond and of the Brunette Type, Philippine Jour. Sc., Sec. B, 1911, vi, 427.

LOCAL QUESTIONS AND NATIONAL PROBLEMS

At its recent meeting the House of Delegates of the Iowa State Medical Association adopted a resolution recommending the publication in THE JOURNAL of the presidential address delivered before that society. This recommendation we gladly accepted,[1] not only because the Iowa association suggested it, but also because we regard the address as a model.

Dr. Littig discussed local conditions without anticipating a national audience; but practically all local questions, such as those he discusses, have a national bearing, and all national questions certainly have a local bearing. What is needed to-day is more discussion in state associations of such national questions as affect the individual states. The key-note of this address is furnished by the able discussion of organization, county societies, medical defense, hospitals, commercialism in medicine and in medical schools, medical examining boards and the relation of the physician to the public. Each of these questions is of national as well as of local importance. Dr. Littig's assertion that the county society is an index of the professional attainments of its members and of the character of the services rendered to the public will apply in every state; and his appeal to the profession to take more active interest in the county society is appropriate in every commonwealth.

Dr. Littig criticizes the somnolence of hospital managers; he urges better hospital equipment, the employment of trained laboratory assistants and anesthetists, and the keeping of more complete records of cases. He commends the movement to standardize hospitals, under consideration by the Council on Medical Education; he decries commercialism in medicine, which creates distrust on the part of the public toward the profession. A physician, he says, is not a tradesman; medical practice is a vocation, calling for the highest ideals and for the most unselfish standard of honesty and purity of purpose. Dr. Littig believes that there are too many commercial medical schools; that commercial teachers in medical faculties are doing more to commercialize the profession than all other factors combined; that these schools should be weeded out; and that prospective medical students should be informed how to select the best schools in which to make their preparation. He urges that medical examining boards should be reorganized with only the best men; that they should be informed with regard to the work actually done in medical schools; and that examinations should be such as to be practical tests of the preparation of the student for practice. He believes that the number of quacks in a community is a measure of the manner in which the profession has met its obligation — that a community intelligent in medical matters is not a good field for quacks. And he might have added that in many instances the medical men and not the laymen of the community are responsible for the conditions, and that too often a splendid outline of work, such as he has presented, ends with nothing, because the suggestions are not taken up by alert committees and pushed to results.

All these questions are discussed as they relate to Iowa, but they are broad questions and just as vital in every state. In fact, no state or community to-day is so isolated or so peculiar that its fundamental problems are not essentially those of other states and communities. Thorough mastery of the conditions and problems of one's own locality will furnish the key to the conditions and problems of the nation. The great need in the profession to-day is for men of high ideals and far-sighted, statesmanlike grasp of medical conditions. Such men are schooled and developed in the local organization, as the Hancocks, the Adamses and the Warrens of the American Revolution were schooled and developed in the New England town meeting. The profession needs executive officers and heads of committees who have large administrative ability and grasp of detail. Such executive officers and administrative heads are to be sought for among the members who take enthusiastic, active interest in their local organizations. These points are well exemplified in Dr. Littig's paper. If every state could have such an address annually, a decided impetus would be given for better things in our organization.

1. Littig, L. W.: The Practitioner, the Profession and the Medical Organization, this issue, p. 1653.

THE SELECT COMMITTEE ON PATENT MEDICINES

For years, those interested in the public health of Great Britain have demanded that an official investigation be made of the "patent medicine" evil. These demands have finally borne fruit and a body known as the Select Committee on Patent Medicines has been appointed by the British government to inquire into the question of the sale of patent and proprietary medicines and of other medical preparations and appliances as well as of the advertisements relating thereto. The committee is to report whether it considers necessary or desirable any amendments of the law now governing the sale of these preparations. As might be expected, the "patent medicine" and proprietary forces are up in arms and are enlisting the help of all those who derive financial benefit from the exploitation of nostrums, "ethical" and otherwise. The proprietary article section of the London Chamber of Commerce has issued a pamphlet in which it declares that the agitation against "patent medicines" has been fomented by the medical profession for reasons purely selfish. It scouts the idea that medical men are protesting against this vicious traffic because of the menace it is to the public health.

By far the strongest and least easily answered argument brought forward in the pamphlet is the undeniable fact that proprietary remedies are largely used by medical men. As THE JOURNAL prophesied,[1] this point was bound to be raised as soon as the "patent medicine"

1. The Proposed Royal Commission on Quackery—a Prophecy, editorial in THE JOURNAL A. M. A., Feb. 3, 1912, p. 349.

V. 58 1912

fakers found their business threatened. The medical profession of Great Britain, though it has done splendid work in exposing the fraud and viciousness of the "patent medicine" business, has taken no pains to see that its own skirts are clear. American and European frauds of the "ethical proprietary" type are still largely used by the English physician as is evidenced from the fact that high-class British medical journals carry the advertisements of such humbugs. With the official organ of the British Medical Association—the *British Medical Journal*—carrying advertisements of such nostrums as Bromidia, Angier's Emulsion, Listerine, etc.—with the *Lancet* lending its pages to the exploitation of such humbugs as Antikamnia, Papine and Kutnow's Powder, and with other English medical journals deriving a revenue from similar and other proprietary nostrums, the British profession will find difficulty in answering this question, which is bound to be put: Wherein is it worse for the public to buy medicinal preparations about which it knows nothing than it is for the medical men to prescribe preparations of whose composition they are and must be ignorant?

Of course the newspapers are coming valiantly to the rescue of the "patent medicine" manufacturers. A well-known journal published in the interest of the British newspapers has stated the case of its clientele with brutal frankness. In an article dealing with the appointment of the select committee and published under the subtitle "A Huge Revenue Threatened," it asks in behalf of the newspapers:

> "Which shall we support, the people who have advertised, are advertising, and will keep on doing so, or the people who don't advertise, and don't believe in it, and who, if they did, haven't the money to spend on it?"

Here, apparently, is the British newspapers' view of the question. The fact that the "patent medicine" evil is one which attacks the public in its most vulnerable point — its health — is apparently of no moment and deserves no consideration when balanced against the fact that it is the source of a gigantic revenue for the newspapers themselves.

In view of the fact that the British public has not been sufficiently enlightened on the "patent medicine" evil to take a very active interest in the question before the select committee, and knowing the enormous vested interests that are threatened, we venture to prophesy that no marked restrictions will be put on the "patent medicine" business as a result of the committee's investigations.

But one thing we may hope for: that the British medical profession may have brought home to it the uncomfortable fact that for the continued exploitation of nostrums, it must accept some responsibility. If the investigations of the select committee bring forth no more tangible results than that of calling a halt on the prescribing of proprietary nostrums by British physicians, it will have accomplished a wonderful amount of good.

Current Comment

REPORTING VENEREAL DISEASES

Following the recommendation of its advisory board, composed of a number of prominent physicians of the city, the New York City Board of Health has adopted resolutions providing for the reporting of venereal diseases. Officers in charge of public institutions, including those supported in full or in part by voluntary contributions, are required to report promptly to the department of health patients suffering from venereal diseases. The resolutions, after reciting that venereal diseases are infectious, communicable and preventable and constitute a menace to public health, require the officers to report promptly the name, sex, age, nationality, marital state and address of patients under observation suffering from any venereal disease, together with the stage and duration of the disease, and the date of infection, if obtainable. Physicians are also requested to report private patients under their care except as to the name and address. The necessary tests and bacteriologic examinations for diagnosis are made by the board of health, and curative serums will be distributed in cases in which the data required for registration are furnished by the physician. As a means of effectively carrying out the objects for which this regulation was provided, the board has asked the board of estimate and apportionment of the city to provide funds for the erection and maintenance of a special hospital for the care of venereal diseases. No such facilities are now available in New York and much of the salutary effect of this important measure would be lost by reason of this lack. The reporting of venereal diseases is an important step in public sanitation, and if universally adopted and thoroughly carried out would go a long way in the control of this prolific source of human morbidity and disease.

SUMMER HEAT AND ADULT MORBIDITY

In Europe during the summer of 1911 the excessive heat was observed by De Fleury[1] to have had a pronounced effect in producing dysenteriform enteritis, appendicitis and paratyphoid with enlargement of the liver in adults. Not only was there increase in such affections during the hot period, but after its subsidence many persons developed gastro-intestinal disturbances, congestion of the liver or some cutaneous affection of digestive origin. In attempting to account for the effects of the hot weather De Fleury says that the abuse of cooling drinks with food, the tendency of foods to spoil and the increasing virulence of pathogenic germs were important factors, but he believes that the most important factor was the diversion of the water in the organism from the kidneys to the skin, with increased excretion of water, with lowering of blood-pressure, but with decreased elimination of toxins. The sweat-excreting apparatus of the skin is equal to only about a fourth of the filtering apparatus of the kidneys and during the hot weather fluids are excreted by the skin almost entirely. It was De Fleury's observation that persons

1. Bull. de l'Acad. de méd., Paris, Nov. 7, 1911, No. 36; abstr. in THE JOURNAL A. M. A., Dec. 23, 1911, p. 2110.

who lived on a fruit and vegetable diet, to the exclusion of meat and eggs, escaped gastro-intestinal disturbances. Hot drinks also acted in a prophylactic way, as did the employment of the lactic ferments. Drugs which increase the blood-pressure and stimulate the kidney function also had beneficial effects. The observations of De Fleury would seem to confirm the dictum that in hot weather it is desirable to decrease the amount of protein food intake, to limit the diet more closely to fruits and vegetables and to ingest plenty of plain water or other bland drinks while the stomach is empty in order, if possible, to increase elimination by the kidneys. The frequency of congestion of the liver would seem also to support the theory of a deficient elimination of toxins as an important cause of the morbidity due to the heat.

PORTRAITS OF THE PRESIDENT AND OF THE SECTION OFFICERS

We present to our readers this week portraits of the President-Elect and of a number of section officers whose portraits have not previously been given in THE JOURNAL. The likeness of President-Elect Abraham Jacobi is inserted as a frontispiece. It is a picture with character and many who receive it will be glad to detach it and have it framed. The pictures of the section officers are also arranged with a view to the possibility of framing. Pictures such as these appear in THE JOURNAL each year, in the issue just before the annual session. These leaders in their especial branches represent exceptionally well every section of the United States. It will be noted that the young men of the profession are largely in evidence. Other official honors have come to most or all of them. Blue has been distinguished recently by being made Surgeon-General of the Public Health and Marine-Hospital Service. But it is safe to say that the honor of an official position in the great representative organization of the profession is as satisfactory to him and to the others as any distinction which they have heretofore achieved. Russ and Hornsby represent the new Section on Hospitals. All these men well deserve the honor which has come to them.

HEALTH IN THE CANAL ZONE

The remarkable record of the Sanitary Department of the Isthmian Canal Commission has been commented on so frequently that a report showing a degree of healthfulness in this formerly pest-ridden country, better than that reached by our best-governed American cities, no longer awakens surprise. Simply as a matter of record, however, it is interesting to note that the report of the Department of Sanitation for March, 1912, just issued, shows that out of 13,108 white employees of the Canal Commission and the Panama Railroad, only three died during March from disease and two from violence, a death-rate from disease of 2.75 per thousand per year, and a total death-rate, including accidents, of 4.58. Even including the 37,987 colored employees, of whom twenty-five died of disease and six from violence, there was a total of only thirty-six deaths from disease and violence out of 51,095 employees, all engaged in the most arduous and dangerous work in a tropical region, noted ever since its discovery by white men as a hot-bed of disease. The total death-rate for all employees for the month of March was only 8.45 per thousand per year. The death-rate for the entire Canal Zone with its 159,514 inhabitants was only 14.67 per thousand per year, a death-rate to which any American city would point with pride. When one turns to the list of white men, women and children from the United States, however, the true significance of the work of the Sanitary Department appears. There were on the Canal Zone in March, 1912, 6,113 white employees from the United States, 4,447 white women and children from the United States and a total of 11,923 white Americans. Yet among this body of nearly 12,000 people there were only four deaths from disease, two of which were deaths of infants less than fifteen days old, the two remaining deaths being one from appendicitis in a man of forty-five and one of organic disease of the heart in a man of forty-two. Typhoid, diphtheria, malaria, measles, whooping-cough, tuberculosis, small-pox and other contagious diseases which cost the United States 600,000 lives annually, are practically abolished in the Canal Zone. And the same results could be secured in every city and village in this country if our present knowledge of disease were applied as intelligently here as it is in the Canal Zone.

V. 58
1912

"PRINCE" GUELPH AND AMRITAM

We have recently been honored — more or less — by a visit from no less a personage than "Prince" John Edward R. Guelph of London, New York, Los Angeles, India and Hasbrouck Heights, N. J. The "prince," in a modified cockney accent, made known his errand, which was to bring before the American Medical Association "the only known beverage that will avert premature old age and senile decay." The name of this newest of "soft drinks" is Amritam, which we are assured is an "oriental nectar" manufactured by the Amritam Company of Los Angeles. Amritam, according to the prospectus, has been analyzed by "a prominent London chemist," Granville H. Sharpe. Mr. Sharpe, who wears a long string of letters after his name, is thus described in *Truth's* "Cautionary List":

> SHARPE, GRANVILLE, H., F.C.S., 11 and 12, Great Tower-street, London E. C.—A so-called "analyst" who makes a business of supplying tradesmen with certificates of the purity and genuineness of the goods they manufacture for use as trade advertisements.

Evidently Mr. Sharpe's testimony is to be accepted *cum grano salis*. By turning to THE JOURNAL files, we find that in 1908, "Prince" Guelph was, according to the Hasbrouck Heights (N. J.) *News-Letter*, establishing the "King Edward Sanatoria of America" for the cure of cancer and tuberculosis. Correspondence with the authorities across the water failed to show that either "Prince" Guelph or "Doctor" Guelph — he went under both titles—or his "sanatoria" were known in England. The New York papers for March 28, 1909, contained humorous accounts of the ejection of "Prince" de Guelph from the Hotel St. Regis for failure to pay his hotel bill. The "prince" at that time had been attempting to launch the "Ermine Social Bureau," the alleged object

of which was the presentation of its subscribers to the court of St. James — subscription price $100. For the "prince"—if he is reported correctly—claims to be no less a personage than a son of the late King Edward of England! Even as long ago as 1909, it seems that "prince" was attempting to float the Amritam company, but presumably New York does not offer so verdant a field for that particular type of promoting as do Los Angeles and Chicago. The New York *World* in giving a very full account of the "prince's" unpleasant experience with the plebeian hotel keeper, refers to the fact that in 1899 the gentleman was arrested when he was going under the name of Dr. John de Guelph Norman. In commenting on the "prince's" claim to subsequent kingship, the *World* said:

"If the 'prince' does not succeed to the throne of England he may have better success in proving title to the kingship of patent medicine men and advertisers."

We do not think that a better summary of the present status of "Prince" John Edward R. Guelph, president of the Amritam Company of Los Angeles, can be given than that just quoted from the *World*.

RECOGNITION WITHDRAWN FROM SEVERAL MEDICAL SCHOOLS

State licensing boards are apparently becoming more active in their inspection of and in their refusal to recognize inferior medical schools. Reports have been received that in Illinois the State Board of Health has recently withdrawn recognition from the Hering Medical College of Chicago and also from two Missouri medical schools located in Kansas City, the Eclectic Medical University and the Kansas City Hahnemann Medical College. The former of these schools, we understand, is not in good standing with the Missouri State Board of Health. Also a report from Georgia states that the Georgia State Board of Medical Examiners has refused to examine the graduates of the Southern College of Medicine and Surgery of Atlanta. We are informed that in New York the registration of the Eclectic Medical College of the City of New York and the New York Medical College and Hospital for Women has been rescinded by the Board of Regents—this being equivalent to the withdrawal of recognition—the action to take effect July 1, 1912. As shown by the statistics of state board examinations published in THE JOURNAL last week, it is noticeable that states harboring low-grade colleges are themselves the recipients of the large majority of the graduates of those institutions. The licensing boards of some of these states are apparently beginning to realize this fact.

"PROFESSOR" SAMUELS

Readers of THE JOURNAL have heard[1] of "Professor" Samuels, the quack who has made millions by selling a weak watery solution of sugar and salt at $5 an ounce. Until recently, Samuels made his headquarters at Wichita, Kan. THE JOURNAL exposed[2] his nefarious trade and asked editorially, "What's the Matter with Kansas?" that it should tolerate a fraud like Samuels. Kansas answered the question by making the state too hot for the quack. As a result, Samuels advertised that he was going to move to Detroit, Mich., so as to be located "nearer the center of the United States," thus indicating that he believed the public's ignorance of geography to be equal to its gullibility. He had barely got settled in his Detroit offices when THE JOURNAL called attention to the fact[3] and asked "What's the Matter with Michigan?" An answer was again forthcoming in no uncertain tones, when the public prosecutor raided Samuels' offices a week ago, arrested the "professor," seized his card-index of victims and carried off a barrel of sugar and a bin of salt. When arrested, the faker declared that he left Kansas because the climate of that state did not agree with his wife's health. It would probably be nearer the truth to say that he left Kansas for his own health. Every man who has the interest of the public at heart will congratulate the Detroit authorities if they succeed in making that city as unhealthful a place for Samuels to live in as Wichita had been made.

1. THE JOURNAL A. M. A., Dec. 24, 1910, p. 2248.
2. THE JOURNAL A. M. A., Oct. 21, 1911, p. 1372.
3. THE JOURNAL A. M. A., March 23, 1912, p. 863.

Medical News

ARIZONA

New Officers.—South Side Medical Society of Tempe and Mesa: president, Dr. B. B. Moeur, Tempe; secretary-treasurer, Dr. R. F. Palmer, Mesa.

Personal.—Dr. R. F. Palmer, founder and manager of the South Side Hospital, Mesa, has leased the institution to Mrs. M. E. Smith.——Dr. George D. Troutman, Tucson, has been appointed health superintendent of Pima County, vice Dr. W. V. Whitmore, resigned.——Dr. R. N. Looney, Prescott, has been appointed superintendent of public health, vice Dr. E. S. Godfrey.——Dr. F. E. Shine, Bisbee, retired president of the Arizona Medical Association, has been appointed a member of the State Board of Medical Examiners.

ARKANSAS

Hospital Notes.—The City Hospital of Fayetteville, erected at a cost of nearly fifty thousand dollars and with accommodations for thirty patients, was dedicated recently.——St. Luke's Hospital, Little Rock, erected by Dr. J. P. Runyon, was recently opened. It has accommodation for fifteen patients and is equipped with all modern conveniences.

Personal.—Dr. H. O. Walker has been elected president of the Newport Board of Health.——Dr. R. L. Maxwell has succeeded the late Dr. D. B. Neal as physician to the Ada Thompson Memorial Home, Little Rock.——Dr. Henry Dickson has been chosen chairman of the Paragould Sanitorium.——Drs. James A. Foltz, St. Cloud Cooper, W. R. Brooksher, H. Moulton, J. G. Elberle, J. D. Southard, J. C. Amis and George F. Hynes have been elected directors of the Sparks Memorial Hospital, Fort Smith.——Dr. S. P. McConnell, assistant superintendent of the Arkansas Tuberculosis Sanitorium, Booneville, has resigned and will resume general practice. On the date of his departure Dr. McConnell was presented with a handsome watch charm by the patients.

State Society Meeting.—The thirty-sixth annual meeting of the Arkansas Medical Society was held in Hot Springs, May 13-16, under the presidency of Dr. Morgan Smith, Little Rock, the society being guests of the Hot Springs-Garland County Medical Society. The following officers were elected: president, Dr. Edward R. Dibrell, Little Rock; vice-presidents, Drs. G. A. Hebert, Hot Springs; St. Cloud Smith, Fort Smith, and R. Q. Patterson, Augusta; secretary, Dr. C. P. Merriwether, (reelected); editor of the state journal, Dr. William R. Bathurst, Little Rock; delegates to American Medical Associa-

tion, Drs. Morgan Smith, Little Rock, and G. A. Warren, Black Rock; alternates, Drs. A. U. Williams, Hot Springs, and W. N. Yates, Fayetteville; councilors, first district, Dr. M. C. Hughey, Rector; second district, Dr. L. E. Willis, Newport; third district, Dr. T. B. Bradford, Cotton Plant; fourth district, Dr. E. E. Barlow, Dermott; fifth district, Dr. R. A. Hilton, Eldorado; sixth district, Dr. C. A. Archer, Ashdown; seventh district, Dr. R. Y. Phillips, Malvern; eighth district, Dr. W. A. Snodgrass, Little Rock; ninth district, Dr. F. B. Kirby, Harrison, and tenth district, Dr. J. T. Clegg, Siloam Springs. Little Rock was selected for the place of next meeting, May, 1913. At the Thursday session a reward of $500 was offered for the arrest of the person who during the closing days of the last session of the General Assembly, "took, stole or misplaced" Senate Bill 451, creating a state health commission.

CALIFORNIA

New Officers.—Orange Medical Association, at Anaheim, May 7: president, Dr. Ida B. Parker, Orange; secretary, Dr. John Wehrly, Santa Ana.

Doctors' Building for San Francisco.—The construction of a store and office building at Eighteenth and Castro Streets, San Francisco, has been commenced. With the exception of the first floor, the entire building will be used as offices for physicians and dentists.

Authorizes Hospital Directors to Build.—Mrs. Whitelaw Reid is said to have authorized the directors of the Red Cross Hospital, San Mateo, to proceed with the construction of a new building, to cost $100,000. Mrs. Reid is building this hospital in memory of her mother, the late Mrs. Darius Ogden Mills.

Personal.—Dr. Starr K. Church, Madera, is ill with typhoid in Johns Hopkins Hospital, Baltimore.——Dr. Frank J. Bailey has been appointed health officer of Red Bluff.——Dr. William Friedberger, Stockton, health officer of San Joaquin County, has been appointed superintendent of the county hospital, vice Dr. J. D. Dameron, resigned, and Dr. R. B. Knight has been appointed health officer.

IDAHO

New Officers.—Pocatello Medical Society: president, Dr. Casper W. Pond; secretary-treasurer, Dr. E. N. Roberts, both of Pocatello.

Endorse Inspection Bill.—The teachers of Ada County, at their meeting in Boise, April 20, endorsed the proposed medical inspection bill for the schools of Idaho.

Personal.—Dr. W. A. Wright, division surgeon for the Oregon Short Line at Pocatello, and acting surgeon-general of the state, has resigned and moved to Salt Lake City, Utah, and has been succeeded by Dr. E. N. Roberts.——Dr. Leo F. Castle, Pocatello, has been appointed house surgeon at Holy Cross Hospital, Salt Lake City, Utah.

ILLINOIS

Declared Not in Good Standing.—The Hering Medical College of Chicago was declared not in good standing by the Illinois State Board of Health at its meeting, April 16. The college had been conditioned by the board for two years past and as it still failed to comply with the requirements, recognition was withdrawn.——Advices from the office of the State Board of Health state that after inspections recently made of the Eclectic Medical University of Kansas City, Mo., and the Kansas City Hahnemann Medical College, the board has declined to accord recognition to either institution.

New Officers.—Macoupin County Medical Society, at Virden: president, Dr. T. W. Morgan, Virden; secretary-treasurer, Dr. T. D. Doan, Scottville.——Henry County Medical Society, at Kewanee, May 2: president, Dr. W. W. Adams, Atkinson; secretary-treasurer, Dr. G. H. Hoffman, Kewanee.——DeKalb County Medical Association, at DeKalb, May 8: president, Dr. Anderson, DeKalb; secretary, Dr. Harry Wright, Hinckley.——Woodford County Medical Society, at Eureka, May 7: president, Dr. C. V. Higby, Eureka; secretary-treasurer, Dr. Millard, Minonk.——McHenry County Medical Society, at Woodstock, May 17: president, Dr. James I. Wernham, Marengo; secretary-treasurer, Dr. A. B. Smith, Woodstock.——Mercer County Medical Society, at Aledo, May 7: president, Dr. H. T. Walker; secretary-treasurer, Dr. A. N. Mackey, both of Aledo.

Chicago

Money Raised for Hospital.—At the annual luncheon of the Mothers' Aid Society of the Chicago Lying-In Hospital, May 16, Mrs. Kellogg Fairbank stated that a hospital fund of $72,000 has been raised and that work would begin in June on the building which is to be erected on Fiftieth Street and Vincennes Avenue.

Memorial to Dr. Brower.—A large mosaic picture back of the altar was unveiled last Sunday at the Church of the Epiphany, Ashland Boulevard and Adams Street, as a memorial to Dr. D. R. Brower, dean of the neurologists of Chicago, who died in 1909. The "Resurrection" is the subject of the unusually beautiful altar piece; the stones used were imported from Venice. The address at the ceremony was a notable tribute to the many-sided life work of Dr. Brower, and to the high ideals of the medical profession in general.

INDIANA

Personal.—Dr. James H. Ford has been elected president of the Indiana Board of Health.——Dr. John Kyle, Indianapolis, is taking an extensive trip on the Pacific Coast.——Dr. C. B. Gutelius, Indianapolis, who gave up his practice on account of ill health a year ago, has recovered and resumed practice.——Dr. William Clevenger, Indianapolis, sailed for Europe, May 15.——Dr. D. W. Fosler has been appointed superintendent of the Indiana Dispensary, vice Dr. J. V. Reed, resigned.——Dr. A. P. Buchman, Fort Wayne, has retired from practice and moved to Des Moines, Iowa.——Dr. and Mrs. T. W. Moorhead, Terre Haute, sailed for Europe, May 18.——A drink-crazed man shot three times with a revolver at Dr. Hamilton P. Franks, Muncey, May 8, but fortunately without effect.——Dr. B. F. Whitmer, Goshen, was knocked down by a runaway horse, May 11, and sustained painful injuries.——Dr. W. H. Coleman, Evansville, is convalescent after operation for appendicitis performed at Deaconess Hospital, May 6.

KENTUCKY

College Will Suspend.—Following the withdrawal of recognition by the Kentucky State Board of Health, the Louisville National Medical College has notified the board of its suspension of operation following its commencement May 23.

Personal.—Dr. W. E. Render, second assistant physician at the Hopkinsville State Hospital, has been temporarily transferred as first assistant physician to the Lexington State Hospital.——Dr. W. E. Allen, Chestnut Grove, narrowly escaped drowning in a flooded creek, which he attempted to ford, April 29.——Dr. Ap Morgan Vance, Louisville, has returned from the south and resumed his professional work.——Dr. John M. Wells, Carlisle, has resigned as health officer of Nicholas County.

Reciprocity Established with Oklahoma.—A letter from Dr. A. T. McCormack, assistant secretary of the Kentucky State Board of Health, states that reciprocal relations have been established between Kentucky and Oklahoma, either on the basis of a written examination or on a diploma from a reputable medical college without examination, if the diploma and the license were granted prior to September 1, 1907. The applicant must have been a resident of the state from which he applies for at least a year, and during that time he must have been a member of the local state and national medical societies of the school with which he is affiliated.

Decision on Killing of Animals.—The attorney-general has rendered an opinion that the State Board of Health has a right to order the killing of animals afflicted with diseases that are communicable to human beings, while the State Livestock Sanitary Board has the right to kill stock which has diseases communicable to other animals, but not to human beings. The significance of this decision is that cows which react to tuberculin are slaughtered under order of the State Board of Health without compensation to their owners; while animals killed by order of the State Livestock Sanitary Board may be paid for by the fiscal court of the county in which the animals are destroyed. Representatives of the State Board of Health, dairymen and the State Livestock Sanitary Board held a conference with the governor and discussed the entire question of the tuberculin testing law. In order to test the power of the fiscal court of a county to pay the owner of a cow condemned as having tuberculosis and killed by the order of the State Livestock Sanitary Board, a suit will be filed in Lexington and the Court of Appeals will be asked to construe the law.

MARYLAND

In Commemoration of Early Physician.—Easton held exercises May 4, a commemorative of Dr. John Coats, first grand-master and founder of the Grand Lodge of Masons of Maryland in 1787. Dr. Coats, a Philadelphian of good education,

V. 58
1912

espoused the cause of the colonies in 1775 and was severely wounded in the storming of Quebec, and later commanded a company in the Eleventh Pennsylvania Regiment. At the close of the war he settled at Easton where he became impoverished and died, being buried at his own request, in the potter's field. The remains were later removed to Spring Hill Cemetery, Easton, where a monument was erected. Eulogies were pronounced at the grave of Dr. Coats, which was decorated with flowers.

Bills Passed by the Recent Legislature.—The following bills were passed by the recent legislature and received the governor's signature:

Increasing appropriation to State Board of Health and making it possible for the board to establish a bureau of sanitary engineering.
For improved registration of vital statistics.
Increasing the appropriation for tuberculosis work.
Reenacting midwifery laws and making them operative through the State Board of Health.
Abolishing the common drinking-cup.
Providing for report to State Board of Health of occupational diseases.
Providing for examination of dogs' heads for the diagnosis of rabies by the State Board of Health and for treatment of indigent patients exposed to the infection of hydrophobia.
Providing for the regulation of sale and distribution of tuberculin and other biologic products used in the diagnosis or prevention of disease in animals.
Providing for an appropriation to be expended by the organization committee of the Fifteenth International Congress on Hygiene and Demography.

The optometry bill and the antivaccination bill for Dorchester County were not reported from the hygiene committee.

Baltimore

Johns Hopkins Commencement.—At the annual commencement of Johns Hopkins University, June 11, Dr. William Crawford Gorgas, M. C., U. S. Army, will be the orator and will speak on his duties in the Canal Zone. President Remsen will make his last appearance as presiding officer of the exercises. The name of the medical department hereafter will be "The Graduate School of Medicine."

Hospital School Opened.—The children's Hospital School, the building for which was given by Mrs. William Painter as a memorial to her husband, was formally dedicated, May 11. Dr. William S. Thayer presided. Dr. Edward O. Janney, in behalf of Mrs. Painter, made the presentation speech. Dr. William H. Welch responded for the school, and the ceremonies concluded with the presentation of the keys by Mr. Arthur G. Brown to Dr. William S. Baer.

Personal.—Drs. W. E. Magruder, Sydney R. Miller and Flora Pollack have been elected trustees of the Prisoners' Aid Society of Maryland.——Dr. Caldwell Woodruff, assistant resident surgeon at Mercy Hospital, has resigned and will practice in Roanoke, Va.——Dr. William Breathwaite, recently appointed to the staff of the Isthmian Canal Commission Hospital, Cristobal, sailed for Panama, May 23.——Dr. Roland B. Whitridge has returned from abroad.——Dr. D. W. Cathell has been elected president, Dr. Robert S. Kirk, superintendent, and Dr. John Roth, assistant superintendent of the Eastern Dispensary.——Dr. George B. Reynolds, while making a professional call, was sandbagged and robbed of a gold watch and $100.——Dr. William A. Knell has been appointed health warden for the twentieth ward, vice Dr. H. J. Hahn, resigned.

MASSACHUSETTS

New Medical Examiners.—Dr. Daniel P. O'Brien, New Bedford, has been appointed associate medical examiner by the fourth Bristol district; Dr. John J. McNamara, Brockton, for the first Plymouth district; Dr. Frank A. Woods, Holyoke, for Hampden County; Dr. George F. Curley, Milford, for Worcester County, and Dr. T. Morton Gallagher, Newton, for Middlesex County.

Personal.—Dr. Lewis M. Palmer, South Framingham, has been appointed a trustee of the Massachusetts Training Schools.——Dr. Willis E. Clark has been appointed resident surgeon at the Malden Hospital, vice Dr. C. F. K. Bean.——Dr. George C. Osgood, Boston, has been promoted to Major, Medical Corps, M. V. M., and assigned to the command of Field Hospital No. 1.

State Medical Society.—The one hundred and thirty-first anniversary meeting of the Massachusetts Medical Society will be held June 11 and 12, in John Ware Hall, Boston Medical Library, under the presidency of Dr. George B. Shattuck, Boston. The Shattuck lecture is to be delivered by Dr. David L. Edsall, formerly of St. Louis, but recently appointed a member of the faculty of Harvard Medical School, whose subject will be "The Clinical Study of Respiration."

MICHIGAN

New Officers.—Detroit Oto-Laryngological Society: president, Dr. P. J. Livingston; secretary, Dr. Emil Amberg (reelected).

Owen Bill Endorsed.—The Flint Board of Commerce, May 14, and the Genesee County Medical Society, May 8, passed resolutions endorsing the Owen bill.

New Sanatorium.—Dr. A. B. Allen is making plans for the construction of a sanatorium in Mount Clemens to have accommodation for forty-five patients and to cost about $35,000.

Search for Lepers.—Dr. R. L. Dixon, secretary of the State Board of Health, Lansing, has gone to Gaylord to endeavor to intercept Samuel Izen, an alleged leper, who is reported to have broken quarantine. The state officers are now searching for a third leper suspect who is said to be in the junk business in Bay City.

Personal.—Dr. W. F. Martin, Battle Creek, is under treatment in Johns Hopkins Hospital, Baltimore.——Dr. H. E. Locher has been elected president of the Grand Rapids Board of Health.——Dr. Karl B. Rucker has been appointed chief physician of the State Reformatory, Ionia, vice Dr. Roy O. Knapp, resigned to accept the position of assistant medical superintendent at the State Hospital.——Dr. J. F. Denslow, recently appointed, has resigned as city physician of Muskegon.——Dr. John W. Bosman has been elected president of the Board of Health of Kalamazoo and Dr. W. E. Collins has been reappointed city physician.——Dr. A. Coulahan, De Witt, who has been ill in a Lansing hospital, is reported to be improving.——Dr. Albert I. Lawbaugh, Calumet, dean of the medical profession of the copper country, was the guest of honor at a testimonial banquet at the Miscowaubik Club, Calumet, April 24. Dr. W. H. Dodge, mayor of Hancock, was toastmaster, and addresses laudatory of Dr. Lawbaugh and his influence on medicine and surgery in Houghton County were made by various members of the profession.——Drs. H. E. Randall, M. S. Knapp and T. S. Conover, have been appointed members of the advisory medical board of Hurley Hospital, Flint.——Dr. B. E. Biggs, formerly superintendent of the Ionia City Hospital, has been appointed assistant superintendent at the State Hospital, Flint.

MISSISSIPPI

College Permanently Closed.—Word is received that at the commencement exercises of the Mississippi Medical College, Meridian, May 11, it was announced that the college would not be reopened on account of adverse legislation passed by the last legislature.

Personal.—Dr. George Leavell, Oxford, is under appointment to go to China as a medical missionary.——Dr. W. B. Thomason, Jackson, has been appointed associate medical examiner for the Alabama Life Insurance Company, with headquarters at Birmingham.——Major Charles Le Baron, Gulfport, medical corps, N. G. Miss., has been appointed chief surgeon.——Dr. Robert W. Rowland, Jr., Jackson, has been placed in charge of the refugee camp at Vicksburg.

MISSOURI

St. Louis

Medical Library Club Election.—At the annual meeting of the St. Louis Medical Library Association, May 15, the following officers were elected: president, Dr. N. B. Carson; vice-president, Dr. J. H. Duncan; secretary, Dr. N. Allison; treasurer, Dr. R. M. Funkhouser; librarian, Dr. F. J. Lutz, and trustees, Drs. F. A. Glasgow and Philip Hoffmann.

Personal.—Dr. George Dock has resigned as dean of Washington Medical School in order to devote more time to his duties as professor of medicine in the institution.——Dr. A. C. Kimball has been appointed a major in the medical corps, N. G. Mo., to date from Feb. 15.——The appointment of Dr. Wheeler Bond as a member of the City Hospital Board has been confirmed.——A memoir of the late Dr. Augustus C. Bernays, noted Surgeon of St. Louis, written by his sister, Miss Thekla Bernays, has just been printed and is being distributed among the friends and admirers of Dr. Bernays.

Hospital Notes.—The managers of the Mayfield Memorial Hospital announced that they are ready to proceed with the new building, to be erected at a cost of about $200,000, on a site of five acres. Other buildings are to be added from time to time as required and the entire project will represent an investment of about one million dollars. It is to be under

the control of the Baptist Churches of America.——The Central Jewish Council has intervened to prevent the erection of a hospital by the orthodox Jewish community, on the grounds that it may injure the present Jewish Hospital. The complaint of the orthodox Jews is that the present Jewish Hospital is not adhering strictly to the Jewish dietary laws. At a meeting held May 8, it was decided to build an addition to the hospital, to cost $75,000, this addition to contain a "kosher" kitchen.

NEW JERSEY

Personal.—Colonel Henry Allers, Harrison, has been appointed chief surgeon of the Medical Corps, N. J., vice Dr. John D. McGill, Jersey City, resigned.——Dr. Lewis R. Souder, Atlantic City, is convalescent after an illness of nearly a year.——Dr. John B. Cassady, Burlington, is reported to be seriously ill.

Mosquito Commission Named.—The following men have been appointed as a commission toward the extermination of mosquitoes: Drs. H. H. Davis, of Camden; J. K. Bennett, of Gloucester City; W. A. Westcott, of Berlin, and Edward S. Sheldon, of Collingswood; and Messrs. Henry D. Moore, of Haddonfield and Andrew H. Moses of Merchantville.

Amendments to Medical Practice Act.—Dr. H. G. Norton, Trenton, secretary of the State Board of Medical Examiners, writes that the legislature amended the medical practice act so that hereafter an education equivalent to a standard four-year high school course must be completed before the student begins the study of medicine. Another amendment secured gives the board power to prosecute quacks and frauds. Dr. Norton also states that reciprocal relations have been established between New Jersey and Pennsylvania.

NEW YORK

New Board Appointments.—State Board of Regents announced, on May 4, the following appointments as members of the State Board of Examiners: Drs. Arthur W. Booth, Elmira; William H. Park, New York City, and Aaron B. Miller, Syracuse.

Registration Rescinded.—Information recently received states that the Board of Regents, at a meeting held recently, rescinded the registration of the Eclectic Medical College of the City of New York and of the New York Medical College and Hospital for Women, and that the action will become operative July 1. This is equivalent to withdrawal of recognition from the institutions named.

Women Elect Officers.—The Women's Medical Society of New York State held its sixth annual meeting in Buffalo, May 10, and elected the following officers: honorary president, Dr. Grace Peckham Murray, New York City; president, Dr. Helene J. C. Kuhlman, Buffalo; vice-presidents, Drs. Angenette Parry, Josephine Walter, New York City, and Edith W. Stewart, Hume; secretary, Dr. Marion Craig Potter, Rochester; treasurer, Dr. Edith R. Hatch, Buffalo; and councilors, first district, Dr. S. Josephine Baker, New York City; second district, Dr. Anna Craig, Kings Park; third district, Dr. Julia G. McNutt, Albany; fourth district, Dr. Julia Kimball Qua, Amsterdam; fifth district, Dr. E. Elizabeth McKnight, Oswego; sixth district, Dr. Sara E. Green, Elmira; seventh district, Dr. Evaline P. Ballintine, Rochester, and eighth district, Dr. Jane Wall Carroll, Buffalo. The next meeting will be held in Rochester.

Vital Statistics for March.—The death rate for the month of March in this state was 16.3, which is about that of the average for the month of March for the past twenty years. The number of deaths, however, was almost 1,000 below the mortality of the last two years. One-third of the deaths occurred at an age past sixty. In the summer hardly more than one-fifth of the deaths are of old people. The decade below sixty was likewise increased. Pneumonia caused 1,200 deaths and other respiratory diseases as many more, so that taken together this group of diseases exceeded all others. During March there was a decrease in pneumonia as compared with January and February, while other acute diseases of the lungs have increased. A large factor in the high mortality of March was diseases of the circulatory system, in the last three months 16.7 per cent. of the deaths being from this class of diseases. The nervous system furnished the next largest number of deaths, about one-half as many as from circulatory diseases. Measles and scarlet fever had their customary spring increase.

Personal.—Dr. Joseph Roby has succeeded E. M. Moore, resigned, as chief of staff of the Infants' Hospital, Rochester. Dr. Moore has been appointed honorary chief of staff and Drs. E. W. Mulligan, Ralph R. Fitch, D. F. MacDonell, E. W. Ruggles, E. L. Hanes, A. C. Snell and B. A. Richards have been appointed members of the consulting staff.——Dr. Gard W. Foster, Auburn, has returned from abroad.——Dr. R. M. Pearce, professor of research medicine in the University of Pennsylvania, delivered the annual Alpha Omega Alpha address of the Gamma of New York Chapter at the Syracuse Medical School, May 21, on "Medical Education."——At the meeting of the board of managers of the State Institute for the Feeble-Minded, Syracuse, resolutions were adopted praising the personality and the work of Dr. James C. Carson, who recently resigned after twenty-seven years of service at the head of the institution.——Dr. LeRoy W. King, Lowville, was operated on for appendicitis in the Watertown City Hospital, May 10, and is reported to be doing well.——Dr. A. Walker, Macedon, fractured his right arm while cranking his automobile, May 10.——Dr. L. A. Frazier, Amsterdam, who is about to retire from the active practice of medicine and move to Mechanicsville, is to be given a farewell dinner by the Amsterdam City Medical Society.——Dr. Walter T. Diver, Troy, has returned from abroad.——Dr. A. F. Miller, Batavia, was seriously injured in an automobile accident, May 3, and was taken to a hospital in Buffalo.——Dr. F. W. Sears, Syracuse, who has been seriously ill with influenza in Baltimore, has returned home convalescent.

New York City

New Officers.—Flatbush Medical Society, May 10: president, Dr. William S. Applegate, Brooklyn; secretary, Dr. William H. Bayles.

Personal.—Dr. John M. Hall, Quarantine, N. Y., has been appointed second deputy health officer, vice Dr. E. S. Rimer, Rosebank, resigned.

Raising Funds for Summer Campaign.—The Diet Kitchen Association has begun a campaign to raise $50,000 for the maintenance of milk stations in the congested districts of the city. The association keeps nine stations open throughout the year.

Obstetrical Society Elects Officers.—At the meeting of the New York Obstetrical Society on May 14 the following officers were elected for the ensuing year: president, Dr. George Gray Ward, Jr.; vice-president, Dr. Samuel M. Brickner; secretary, Dr. Howard Canning Taylor; treasurer, Dr. Hermann Grad.

Poliklinik Dinner.—The staff of the German Poliklinik celebrated the twenty-ninth aniversary of the institution, May 17. Dr. Ludwig Weiss presided as toastmaster, and narrated the history of the institution from small beginnings until it now treats 75,000 patients annually and has developed great financial power. Dr. H. J. Boldt spoke of the advancement of the institution in the way of erecting a hospital, and other members of the board of trustees testified as to the growth and value of the institution.

Buffalo

Harrington Lectures.—The Harrington lectures arranged by the medical faculty of the University of Buffalo will be delivered in Alumni Hall by Dr. Ludvig Hektoen, Chicago, May 28 to 31, on "Immunity."

Examination for Hospital Superintendent.—A competitive civil service examination is announced for the position of medical superintendent for the J. N. Adam Memorial Hospital for Incipient Tuberculosis at Perrysburg. The position offers a salary of $2,000 a year.

New Hospital.—Bids are being secured on the plans and specifications of the new hospital for the care of malignant diseases which has taken over the Gratwick Cancer Laboratory and will continue its work. The building first to be constructed will cost $65,000 and will accommodate twenty-five patients.

Personal.—Dr. Herbert U. Williams, professor of pathology in the University of Buffalo, has been made acting dean, vice Dr. M. D. Mann, resigned.——Dr. Roswell Park has been selected as chairman of the citizens' committee to arrange for the International Congress of School Hygiene to be held in Buffalo next year.

Municipal Hospital to Be Built.—Initial steps have been taken for the erection of the Municipal General Hospital. A site of 82 acres has been acquired at a cost of $20,000, notice of intention for an appropriation of $600,000 has been passed. The first group of buildings will be wards for advanced cases of tuberculosis, and this department will be named after Dr. John H. Pryor in recognition of his services in this special field.

V. 58
1912

OHIO

New Officers.—Union County Medical Society, at Richwood, May 3: president, Dr. A. B. Swisher; secretary-treasurer, Dr. Angus MacIver, both of Marysville.

Physicians' Office Buildings Popular in Columbus.—Dr. Frank Winder has repurchased the Barnhill property, Columbus, and will remodel it, making five apartments for physicians.——A twenty-six room building, at Grant and State Streets, is being built for Dr. C. T. Okey; a like building on State Street for Dr. Earl Gilliam. Dr. S. Leach has just completed a stucco building for similar purposes on North High Street, and Drs. W. D. Inglis and Swope have remodeled a building for physicians' offices. On Goodale Street, Dr. J. A. Riebel has made excavations for a three-story building, to be used for physicians' offices.

OREGON

Personal.—Dr. Calvin S. White, Portland, secretary of the State Board of Health, fell recently, fracturing the left ulna and dislocating the left elbow.——Dr. R. D. Byrd has resigned his position as physician to the state penitentiary, Salem.

Doctors' Building Planned.—The Morrison Trust Company has contracted to erect a building at Seventh and Morrison Streets, ten stories in height. All but the lower two stories of this building are to be arranged for physicians' offices and the structure is to be named "The Doctors' Building."

Rush Graduates Organize.—The Oregon Rush Alumni Association was organized in Portland, May 16, with an initial membership of twenty-eight. The following officers were elected: president, Dr. L. W. Hyde; vice-president, Dr. Charles B. Frisbie, and secretary-treasurer, Dr. C. J. McCusker, all of Portland.

College Changes.—At the twenty-fifth annual meeting of the faculty of the Medical Department of the University of Oregon, Portland, May 9, Dr. Simeon E. Josephi, dean of the faculty since the organization of the institution, resigned and Dr. Kenneth A. J. Mackenzie was chosen his successor. As a mark of esteem and respect the retiring dean was honored by his colleagues with a banquet at which he was presented with a silver pitcher and tray, the presentation speech being made by Dr. George B. Story.

PENNSYLVANIA

New Officers.—Medical Club of Harrisburg: president, Dr. Samuel Z. Shope; and secretary, J. Harvey Miller.

Hospital News.—A charter has been granted the Nesbitt East Side Hospital about to be erected on Wyoming Avenue, Dorranceton, Wilkes-Barre.——A private hospital is to be located in the residence of Mrs. Alexander U. Logan, Parnassus, by four ladies who have had long experience in hospital work.

Antituberculosis Fight.—A charter for the Erie Antituberculosis Society was granted April 29. Application for this charter was made by Drs. George B. Kalb, J. W. Wright and others interested in the establishment of a local sanitarium for tuberculosis. Mr. George D. Shelden has given as a site a twelve-acre farm near the city, said to be worth about $10,000.

State Vaccination Commission to Meet in Atlantic City.—The Pennsylvania State Vaccination Commission, appointed by the governor to make inquiries into the subjects of vaccination and small-pox, will probably hold its session at Atlantic City during the meeting of the American Medical Association. Physicians who have had large experience with vaccination or small-pox and who are in position to give what would constitute valuable testimony before the association, are requested to communicate with Dr. Jay Schamberg, 1922 Spruce Street, Philadelphia.

Personal.—Dr. Z. C. Myers, New York, who recently was operated on in the University of Maryland Hospital, Baltimore, is reported to be convalescing.——Dr. P. A. Noll, Dallastown, who fractured his patella in a fall last week, has not yet recovered the full use of his leg.——Drs. George B. Kalb, J. W. Wright and Frank P. McCarthy have been elected directors of the antituberculosis society of Erie.——Dr. S. N. Traver Harrisburg, Steelton, has returned from Erie and will locate in Harrisburg.——Dr. James W. Walker was shot and painfully wounded at his home in Melrose Park, May 15, by a man who is said to have been intoxicated at the time.——Dr. James W. Geist, Wilkes-Barre, Pa., has been appointed Captain Medical Corps, N. G. Pa., and assigned to the Ninth Infantry.

Philadelphia

Hospital Officers Reelected.—Contributors to the Pennsylvania Hospital held their one-hundred sixty-first annual meeting and luncheon May 6, and reelected the board of managers.

Club to Entertain Presidents.—The medical club of Philadelphia will hold a reception at the Bellevue-Stratford, June 7, in honor of the president, president-elect and secretary of the American Medical Association and the president of the Medical Society of the State of Pennsylvania.

Personal.—Dr. Mason McCollin was recently injured about the head and body in a runaway accident, May 3, and was removed to the Medico-Chirurgical Hospital.——Dr. William M. Welch was given a dinner at the Hotel Majestic by the Northern Medical Association, May 30, in celebration of his completion of one-half a century of practice.

Entertainment Committee for Foreign Visitors.—At a preliminary meeting of the citizens' committee on plans for the entertainment of the German Physicians' Vacation Study Society, numbering about 200, who visit the United States in September, Dr. James M. Anders was elected president, and Dr. Albert Bernheim, secretary of the committee.

Better Water Supply for West Philadelphia.—The chief of the Bureau of Water announced on May 13 that plans are being prepared for the improvement of the West Philadelphia water supply, the work to be done with $300,000 to be appropriated from the new loan. Changes will be made in the Belmont filters, which increase the filtration capacity from 40,000,000 gallons a day to 60,000,000 gallons. This will necessitate a larger pipe line to carry the water from Belmont to the Georges Hill reservoir, and will enable the bureau to keep the water in that reservoir at a higher level and thus increase the pressure in West Philadelphia.

TENNESSEE

Alumni Meeting.—The second annual banquet of the Alumni Association of the Medical Department of Lincoln Memorial University, Knoxville, and the old East Tennessee Medical College was held in Knoxville, May 9, and Dr. Charles F. Davis, Knoxville, was elected president. Dr. G. H. Henderson presided as toastmaster and addresses were made by Rev. Frederick N. Avery, Cleveland, Ohio, who recounted the history of the university, and Dr. J. Q. A. West gave reminiscences of olden days at the institution.

New Officers.—Middle Tennessee Medical Association, thirty-sixth semiannual session at Pulaski, May 16-17: president, Dr. C. L. Goodrich, Fayetteville; secretary-treasurer, Dr. R. W. Billington, Nashville.——West Tennessee Medical and Surgical Association, twenty-first annual session at Memphis, May 16-17: president, Dr. J. T. Herron, Jackson; secretary-treasurer, Dr. I. A. McSwain, Paris, (reelected). The association adopted a resolution favoring the passage of the Owen bill.——Morgan County Medical Society, reorganized at Oakdale, May 13: president, Dr. John W. L. Cooper; secretary-treasurer, Dr. W. E. Gallion, both of Oakdale.

TEXAS

County Secretaries Meet.—The annual meeting of the State Association of the County Secretaries of the State Medical Association of Texas was held, May 8, in Waco, and the following officers were elected: president, Dr. Thomas Dorbandt, San Antonio; vice-presidents, Drs. J. S. Calhoun, Henrietta, and R. H. Cockran, Coleman, and Secretary-treasurer, Dr. J. E. Robinson, Brownwood.

Personal.—Dr. Joseph H. Reuss, Cuero, has been appointed chief surgeon of the San Antonio and Aransas Pass Railroad, vice Dr. Amos Graves, San Antonio, deceased. The headquarters of the hospital department are to be removed to Yoakum.——Dr. C. T. Moffitt, Beeville, is reported to be seriously ill with cerebrospinal meningitis.——Dr. Henry Hartman, Temple, has been appointed state bacteriologist, vice Dr. Samuel N. Key, Austin, resigned.——Dr. E. Toomim has been appointed health officer, Waco, and Dr. H. E. Hoke, state chemist and food inspector.

Meeting of State Association.—The forty-second annual meeting of the State Medical Association of Texas was held in Waco, May 7-9, under the presidency of Dr. J. H. McCracken, Mineral Wells. San Antonio was selected as the next place of meeting and the following officers were elected: president, Dr. J. S. Turner, Dallas; vice-presidents, Drs. J. B. McKnight, Brady; O. L. Norsworthy, Houston, and J. W. Overton, Sweetwater; councilors, fourth district, Dr. S. C. Parsons, San Angelo, reelected; eleventh district, Dr. Albert Woldert Tyler; thirteenth district, Dr. H. Ball, Crystal Falls (reelected); fourteenth district, Dr. F. D. Boyd, Fort Worth (reelected); delegates to the American Medical Association, Drs. W. B. Russ, San Antonia reelected, and J. H. McCracken, Mineral Wells. The report of the committee on public policies and legislation urged the members to induce every senator and

representative in congress to support the Owen bill. Objections were urged to the amendment of the medical practice act, and recommendations were made that a state insanity commission and a system of detention hospitals for the insane be established.

VIRGINIA

New Officers.—Northern Neck Medical Association, at Reedville, May 4: president, Dr. I. E. Cockrell, Reedville; secretary-treasurer, Dr. R. O. Lyell, Warsaw.

Tuberculosis Hospital Planned.—Preliminary plans adopted for a new reception hospital for the Catawba Sanatorium, to be built near Salem, provide for an institution of forty beds. A central administration building is to be constructed and the patients will be located in wings on either side.

Personal.—Dr. F. M. Hodges, Richmond, sailed for Europe, May 8.——Major S. R. Sayers, Wytheville, has been appointed chief surgeon of the Second Brigade, Virginia Division, United Confederate Veterans.——Dr. G. B. Lawson, Roanoke, has been appointed a member of the State Board of Medical Examiners, vice Dr. Rawley W. Martin, Lynchburg, deceased.——Dr. Joseph C. Dunford, Portsmouth, was painfully injured in an automobile accident, April 23.

GENERAL

Balneologists Organize.—The American Association for Hygiene and Public Baths was organized in New York City May 15. Dr. Simon Baruch was elected president and Dr. Joseph E. Gichner, Baltimore, a director. It was decided to hold the next meeting of the association May 30, 1913.

Frisco Surgeons Hold Meeting.—At the eleventh annual meeting of the Frisco System Medical Association held in Springfield, Mo., May 13 and 14, the following officers were elected: president, Dr. W. S. McDonald, Fort Scott, Kan.; vice-presidents, Drs. J. R. Dawson, Birmingham, Ala., and B. C. Schwab, Sapulpa, Okla.; secretary, Dr. H. N. Chapman, St. Louis; treasurer, Dr. W. A. Camp, Springfield.

Advertisements for Medical Positions.—The power of advertising is being recognized by those in charge of hospitals and other health enterprises. Boston is advertising for a health commissioner to fill the position to be vacated by the retirement in near future of Dr. Samuel H. Durgin, and Montreal General Hospital is seeking an experienced physician for general superintendent.

Approaching Pan-American Medical Congress.—The Sixth Pan-American Medical Congress will convene at Lima, Peru, the first week in August, 1913, in connection with the Latin American Medical Congress and the Congress of Hygiene. The international executive committee includes two members from each of the various countries of North and South America, except that the United States has four members in the committee. Round-trip excursions are being planned from New York and New Orleans by way of Mexico to Panama and down the coast to Peru, returning by the new Trans-Andes railroad through the tunnel to Buenos Aires or otherwise as desired. It is expected that the Panama canal will be ready for the steamer carrying the delegates from the United States. Among the attractions offered in Peru are trips to the ruins of the Incas, etc. The congress is to be divided into eight sections on the usual subjects.

Bequests and Donations.—The following bequests and donations have been announced:

Johns Hopkins Hospital, Gynecologic Department, Baltimore, $5,000; Harper Hospital, Detroit, $30,000, by the late Miss Octavia W. Bates.

Mount Sinai Hospital, New York, $10,000, by the late Jacob W. Mack.

Rockford (Ill.) Hospital, $15,000, by the late Mrs. A. Emmagene Paul, Chicago.

Paterson (N. J.) General Hospital, $2,000, receipts of the recent charity ball.

Harvard Medical School, Boston, $10,000, from Mrs. William H. Underhill for a fund, the income of which is to be used for original investigation into the diseases and disturbances of the nervous system.

Worcester (Mass.) Memorial Hospital, $10,000, by the will of Milton G. Higgins, for a nurses' home.

Children's Hospital, Philadelphia, $5,000; Pennsylvania Hospital, Philadelphia, over $5,000, by the late Thomas W. Haldron.

Germantown Hospital, Philadelphia, a contingent bequest of $100,000, by the late Frank J. Firth.

Philadelphia Hospital for Women, $5,000; Seaside Hospital for Invalid Women, Atlantic City, N. J., $1,000; Kensington Hospital for Women, $1,000, and the residue of the estate to the Women's Hospital, Philadelphia, by the late Delphine T. Hopper.

St. Joseph's Hospital, Syracuse, $25,500; Women's and Children's Hospital, Syracuse, $19,000, and the Homeopathic Hospital, Syracuse, $5,500, the proceeds of the general hospital fund recently solicited.

The will of Augustus W. Openhym leaves $275,000 in trust which on the death of his wife will be divided in three portions: one to Mount Sinai Hospital, New York City, for the maintenance of a free ward; one to the German Hospital to provide rooms at lower than the regular rates for worthy patients, and the third to Columbia University to establish the Openhym fund for research work into the cause, prevention and cure of cancer, with the provision that if this work became unnecessary the fund shall be used for research in other diseases.

St. Vincent's Hospital, New York City, $10,000; Hospital for Ruptured and Crippled Children, New York City, $5,000, by the will of Katherine L. D. Harnett.

Mount Sinai Hospital and Montefiore Home for Chronic Invalids, New York City, $2,000 each; General Memorial Hospital for the Treatment of Cancer and Allied Diseases, $1,500, by the will of Lewis S. Wolff.

Mount Sinai Hospital, Beth Israel Hospital, German Hospital Dispensary, Montefiore Home for Chronic Invalids, Presbyterian Hospital and St. Vincent's Hospital, New York City, each $5,000, by the late Moses Weinmann.

FOREIGN

Death of Pribram.—Hofrat Prof. Alfred Pribram of the German university at Prague died suddenly last month, aged 71. He has been professor of medical pathology since 1873 and has long been director of the first medical clinic. Among his numerous works, his "Grundzüge der Therapie" passed through a second edition in 1907.

Honors for Roux of Lausanne.—The local medical society at Lausanne, Switzerland, celebrated recently with much ceremony the twenty-fifth anniversary of the connection of Prof. C. Roux with the Lausanne public hospital. A check for over $10,000 (51,914 francs), to which 1,180 donors had subscribed, was presented to him and turned over at once by him to the special endowment of the local surgical clinic. Roux' contributions to surgery are well known, especially his technic for gastro-enterostomy, and he was long on the editorial staff of the *Revue Médicale de la Suisse Romande.*

Honors for von Jaksch.—The completion by Rudolf von Jaksch of twenty-five years as professor of internal medicine in the university at Prague was celebrated recently by his friends and pupils. The *Prager med. Wochenschrift* issued a special number in his honor and a *Festschrift* was presented to him. His contributions to scientific literature number 209 to date. Among the most noteworthy is his work on diagnosis, which was epoch-making in its day and even now ranks as one of the most widely accepted authorities in this field. It has been translated into six languages. His work on splenic anemia is sufficiently recent to be recalled by every one. His father was an eminent internist and professor at Prague before him.

LONDON LETTER

(*From Our Regular Correspondent*)

LONDON, May 18, 1912.

The Select Committee on Nostrums

The Select Committee appointed by the House of Commons to inquire into the law and advertisement of "patent medicines" (nostrums) has met for the first time to hear evidence. The first witness examined was Sir Nathaniel Highmore, Solicitor to the Customs and Excise, who gave evidence as to the law regulating the sale of nostrums and the revenue from this source. Duties on nostrums were first imposed in 1783. They took the form of a double duty which is still maintained. Each vender must annually take out a license for which the charge is 5 shillings ($1.25). On each article sold a duty is levied according to its price. On an article sold for a shilling (24 cents), the duty is 1½ pence (3 cents); exceeding a shilling and not exceeding 2½ shillings, 3 pence (6 cents); exceeding 2½ and not exceeding 4 shillings, 6 pence (12 cents), and so on up to articles exceeding in value 50 shillings ($10), on which the duty is 20 shillings ($4). The enormous sale of nostrums may be judged from the following figures of revenue derived from them, bearing in mind that most of the articles bear the lowest duty (3 cents). For the year ending last March the number of licenses issued (i. e., of persons vending nostrums) was 43,117, and the duties on nostrums, apart from licenses, was $1,600,000. As the legislation on nostrums is over a century old there are some difficulties in its administration and in defining what constitutes a nostrum. The practice is to be guided by the fact that an article is recommended as a remedy for disease or not. Thus a soap recommended as a hair wash is not liable to duty, but if recommended for the prevention or cure of any disease of the scalp it is. In the same way proprietary articles advertised in the medical press to be used for dispensing are not liable to duty. Sir Nathaniel Highmore answered in the negative the important question whether there is anything in law to prevent any person from making a mixture containing any substance, except obvious poisons, advertising it as a cure for disease and selling it broadcast on the payment of stamp duty. It is this fact which

V. 58
1912

actuates those who have demanded this inquiry and it is only from legislation on this point that any good can be hoped for.

The consternation produced by this inquiry among nostrum-mongers and others interested in the trade is shown by an article entitled "A Huge Revenue Threatened," which has appeared in the *Newspaper Owner*, a journal published in the interest of newspaper proprietors. It states that the capital expended by the owners of proprietary articles during the last hundred years is "in the region of one hundred million" ($500,000,000). A large part of this enormous sum has gone into the pockets of newspaper owners, who have published not only mendacious advertisements, but puffs disguised as editorials. The present advertising expenditure is estimated at $10,000,000 per annum. Morning papers are said to derive at least a third of their revenue from advertisement of nostrums and evening and weekly papers as much as half or even three-quarters. Each newspaper is invited to ask itself the question, "Am I to risk losing my share of two million (pounds) per annum?" The article has at any rate the merit of frankness. It appeals only to the mercenary motives of those interested without any of the hypocrisy, so usual in politics, when private interests pretend to exist for the public good.

The National Health Week

The remarkable success of the "National Health Week," which is one of the results of a movement started only a year ago by a small philanthropic society of engineers, has been described in my previous letter. Some further particulars can now be given. Public attention in various parts of the country has been focused on the question of the national health. The coordination of a large number of voluntary isolated services, official, religious, philanthropic and scholastic, has been achieved. Health officers have been particularly pleased with the amount of amateur interest which has been focused on health problems. It has been shown that the amateur, if willing to be directed, can prove a valuable force. A vast amount of help has been received both before and during the week from municipal authorities; from voluntary health societies, by lending kinematograph films and providing lectures; from the clergy by sermons; from physicians by lectures and demonstrations; from schoolmasters, teachers and class leaders by instruction of their flocks; from merchants by the loan of advertising space; from artists, journalists and business advisers along the lines of their specific work. About 100 towns throughout the country were approached mainly through individuals, with the suggestion that they should form committees for carrying out a Health Week to begin on April 28. Such committees were formed in about forty towns, either with or without municipal sanction. In addition, in about 200 towns individuals endeavored to promote some sort of health celebration. The Health Week Committee laid down a suggestion program in vague terms, feeling that the only chance of success was to leave to local initiative the proper course to take under the circumstances. The chief feature in the program was the town's meeting with the mayor in the chair and the health officer as one of the speakers. The municipality thus took the people into its confidence, the health officer describing what had been done, what is being done, and what it is hoped to do in promoting the public health. In other places parts of the program were sermons, lectures and demonstrations of cookery, nursing, physical drill, morris dancing, etc. The most elaborate program was undertaken at Halifax, the central feature being a town meeting of 3,000 people. Sermons were preached in forty places of worship and instruction given in a large number of Sunday and adult schools. In all the day schools the first lesson each morning during the week was devoted to some health subject. On May day twenty-five schools were thrown open for exhibition of physical exercises, morris dancing and organized games. In another town, Warrington, some of the factories ceased work for half an hour while lectures were given by the health officer or his assistants.

PARIS LETTER

(From Our Regular Correspondent)

PARIS, May 10, 1912.

Municipal Elections and Public Hygiene

During the recent municipal campaigns throughout France the Association ouvrière pour l'hygiène et la sécurité des travailleurs has prepared a list of demands regarding public health. The Association urged the necessity of convincing future municipal counselors that the first duty of municipality is to protect public health. It recommended voting only for candidates who promise to administer a program of hygienic reform, directing the struggle chiefly against infant mortality; in addition, drawing up each quarter a detailed report of the hygienic work of the municipal council and, on each occasion, in all public assemblies, to interpellate candidates and to require of them some account in this respect.

French Medical Journalism Judged by an Italian

Dr. Marco Luzzatto, of Padua, recently published in the *Rivista veneta di scienze mediche*, a study of medical journalism in different countries. He finds that French medical literature differs from the German especially in the predominance of clinical medicine, properly so called, over scientific and laboratory medicine. This is due chiefly to the temperament, rather synthetic than analytic, of the race, to the example and influence of great clinicans, such as Laënnec, Trousseau and Charcot, and, finally, to the abundance of hospital material. While, indeed, until a few years ago, German scientific work came almost entirely from the universities, on the other hand, since the beginning of the nineteenth century, the hospitals of Paris have become centers of clinical study. According to Dr. Luzzatto, no one is more capable than the French of recognizing the characteristics of a new morbid syndrome or its varieties, no one can present these facts in a more expressive manner, a little schematic, possibly, but perfectly clear and intelligible. He cites the numerous clinical syndromes described in so masterly a fashion by Charcot and, more recently, by Pierre Marie. In the course of the last twenty years, however, French medical journalism has lost a little of this distinctively clinical character, and laboratory researches have been given their legitimate place. The *Journal de physiologie et de pathologie générale* and the *Archives de médecine expérimentale* express the tendency toward a rigorously modern and scientific production. Physiologic and pathologic chemistry alone is still very far from the broad and powerful development it has already attained in Germany. On the other hand, France excels in the domains of neurology and of technical journalism. The *Revue neurologique* can compete with the best German *Centralblätter*, if indeed it is not superior to them. In no other literature does Luzzatto find anything equal to the *Iconographie de la Salpêtrière*, which, in combining the charm of the artist with the seriousness of the scientist, shows the spirit of Charcot.

The Physiognomy of Murderers

Drs. A. Marie and L. Mac-Auliffe have reported, in one of the recent meetings of the Académie des Sciences, the results of their study of the physiognomy of murderers, based on metrical photographs (face and profile) of 250 condemned murderers of whom thirty-five are women. Of this number, asymmetries have been found in the following proportion: predominance to right, seventy-three; predominance to left, forty-eight. Large jaws, broad and high, have been observed in seventy cases.

From their researches Marie and Mac-Auliffe conclude that murderers are recruited chiefly from the muscular type (rectangular face, presenting equal proportions from the line of hair growth to the root of the nose, from the root of the nose to its base, from the base of the nose to the point of the chin). The massive development during growth, observed in many murderers, is not peculiar to them, but is also found among respectable people; this development explains the frequency of the broad measurement of the extended arms described by the school of Lombroso. A rather large number of murderers have a combination of the muscular and digestive types (pyramidal face, with broad jaws, flat nose, low and narrow forehead). It is quite natural, as has been said, that "gross appetite served by great muscles" might induce a murderous act. This curious combination explains the frequency among murderers of large jaws, described many times by anthropologists and wrongly attributed to the existence of a theoretic crude type, more or less closely related to the anthropoid apes.

BERLIN LETTER

(From Our Regular Correspondent)

BERLIN, May 3, 1912.

The Duel Compulsory Among Army Medical Officers

As is well known the idea is still widely prevalent in Germany that a personal insult can be wiped out only by the shedding of blood, and in the army it is such a powerful tradition that every one who does not act according to it, that is, who refuses a challenge to a duel in case of a serious insult, is compelled to resign. Notwithstanding the fact that

protests have been made for a long time and especially against compulsory duelling, in assemblies, in the press and in parliament, this evil custom has not been abandoned. Some years ago an imperial edict declared that the duel should be reserved for extreme cases, and that the honorary councils (Ehrenräte) should hinder as far as possible all duels for personal quarrels. Notwithstanding this, every year several affairs have occurred, in which usually one of the contestants loses his life. For this reason an affair of the kind which occurred two years ago but which has only of late become known, is again attracting very great attention and has led to a lively debate in the press and in the Reichstag. This case is of special interest to physicians because it concerned two of our colleagues. In a small city in Würtemberg one physician was insulted by another, a staff surgeon in the reserve. The occasion was a quarrel in reference to the Krankenkassen. The local military court of honor decided that he must challenge his opponent to a duel. The physician, however, refused to obey this order because considerations of religious duty, of human law, of logic and of his family forbade him to challenge the other to a duel. After this statement, the court of honor decided that in consequence of this breach of professional ethics, he was guilty of an injury to the honor of the profession and proposed that he should be dismissed from the reserve medical corps. The decision was laid before the emperor, as the commander in chief of the army. The emperor decided, however, that a refusal on religious grounds to fight a duel should not be made the occasion of a judgment by the court of honor, but that a member of the military medical corps who had acted in this respect so contrary to the fundamental views of his professional colleagues could not remain any longer in his service. In view of the fact that the physician in question had given no occasion for the insult offered him and was innocent, the emperor would permit him to resign voluntarily and not be expelled from the army against his will and as a punishment. The imperial decree which, inasmuch as the physician in question belongs to the radical party, has just been published in a radical party journal was subjected to severe criticism in the liberal and radical press (*Zentrumspresse*). In response to an interpellation in the Reichstag, the minister of war tried in a somewhat awkward way to defend the emperor's decree, but aroused vigorous opposition on the part of a majority of the house (naturally with the exception of the conservative parties in which the representatives of the nobility and the great land-holders form the majority). Naturally this case gives occasion for combating the duel in the army with increased vigor and the socialist party has therefore already made a motion in the Reichstag that every one who makes or accepts a challenge to a duel shall be dismissed from the army. In view of the conception of honor and the defense of honor prevailing among the majority of army officers, both of the line and medical corps, it is not to be expected that the emperor will accept such a measure, and so everything soon will be just as it was before.

Relations of Roentgenologists to Other Physicians and Their Patients

The annual meeting of the German Roentgen Society, held in the middle of April in Berlin, adopted the following resolutions bearing on the questions involved in the title: 1. Roentgenology is a fully justified medical specialty, like laryngology, ophthalmology, etc. 2. The roentgenologist is a specialist, and as such is to be consulted by the physician or patient with reference to making or confirming a diagnosis, in conformity with the generally recognized customs for consultations. 3. The roentgenologist makes use of the Roentgen methods in addition to general clinical methods. He is to decide what method shall be applied (that is, the exposures, roentgenoscopy, transillumination, orthodiagraphy, teleroentgenography, etc.). 4. The plates prepared for the purpose of making the diagnosis, the negatives, screens, etc., are the property of the roentgenologist, in the same way, *e. g.*, as histologic preparations belong to the consulting pathologist. But it is self-evident that for reasons of professional comity the roentgenologist shall at any time voluntarily place a proof of the plates, a negative or other articles of the sort at the disposal of the consulting physician. 5. The delivery of plates, proofs, etc., to the Krankenkassen, insurance societies, etc., is to be on the basis of special arrangements. It is also customary for the roentgenologist to permit the use of his material in case of necessity. 6. The roentgenologist may voluntarily without charge or for pay furnish the patient a proof or finished print, but it is advisable that this should be done only in cases in which no damage or disquieting of the patient is likely to result from the practice.

VIENNA LETTER

(From Our Regular Correspondent)

VIENNA, May 10, 1912.

Renewal of French Prize for Austrian Physicians

Two French physicians, Drs. Moussand and Rivier, of Paris, have instituted a prize of 1,000 francs ($200) to be called Prix Pierlot, which will be granted under the following conditions: Physicians of Austrian birth and nationality only may apply for the prize who gained their diploma of M.D. not longer than four years ago. They must produce at least one scientific paper, and they must spend the money during a stay in Paris, where they have to work in the hospitals and engage there in scientific work. The prize will be granted by the medical faculty of Vienna, to which the applications must be addressed. The successful applicant must, after his return from Paris, report to the faculty his work and his observations. The object of the prize offered is the establishment of the closer relations between the Austrian and French medical faculties which existed several years ago, when Austrian and French physicians used to exchange their experiences on diseases of the nerves and on experimental pathology. This prize was offered in 1911, and this year is repeated.

Jubilee of the Vienna Poliklinik

A few days ago, the Poliklinik in Vienna celebrated its fortieth anniversary. This institution is in fact now an appendage of the General Hospital, and it is well known to all American physicians studying in this city as the place where excellent instruction in all branches of our art may be had. Originally it was a small out-patient dispensary and, although it gathered at the outset the very best of medical instructors and the best-known specialists, it was then eighteen years before it could move into its own premises next to the old General Hospital. While in the first year of its existence a little less than 12,000 patients entered through its gate, in 1911 more than 87,000 new patients were seen in the various departments of the Poliklinik. Gradually the number of beds was increased, so that at present the hospital attached to the Poliklinik numbers 150 beds, thirty-two of which are for children.

There are all branches of medicine taken care of, and among the staff of the hospital were and are men whose names as specialists have great and far-reaching reputation. Thus for instance, the laryngologic department was once under Schnitzler, Chiari (now Koschler), the otologic under Urbantschitsch (now Alexander), the pediatric under Monti (now Hamburger), the urologic under von Frisch and the other departments under men of similar reputation. A large number of classes is controlled by the American Medical Association of Vienna, and the courses are equivalent to those given in the general hospital of the university. The importance of the professorships of the Poliklinik may be esteemed best by the fact that very often the regular professors of the university are chosen from among the men of the Poliklinik. Last year the Poliklinik was assured of the possession of an acre for enlarging the existing hospital and coming into the vicinity of the new general hospital, the pride of the Vienna medical profession.

A fact worth mentioning is the number of major operations (1,200), performed in the Poliklinik hospital last year; while altogether 2,720 in-patients were dealt with, and the number of new patients seen since 1872 is 1,880,135. A festival celebration took place recently in commemoration of the fortieth birthday and hopes were expressed that the fiftieth anniversary of the day would prove as successful as all others.

Railway Cars for Sick Passengers

The state railway of Austria has just brought on its lines a new type of cars for patients requiring transportation over long distances. The first-class car has a compartment for the patient, into which the ill persons can be wheeled without any discomfort, sitting or in a recumbent position. This "ward" is completely up to date hygienically. A cooling apparatus for the hot season is provided. Of course, there is ample room for physicians and nurses, and special water closets. For the transport of a larger number of patients, special hospital cars have been adopted, which will accommodate from four to eight persons each. All the patients can be wheeled into the cars from the side, and here too a complete modern hygienic equipment has been provided. The idea is to enable patients going from home to a hospital, or to one of the health resorts, to use the railway. In cases of accidents on the railroad, the cars will also be very convenient.

V. 58
1912

Association News

CLINICS AT ATLANTIC CITY

The Committee on Clinic Days calls attention to the program announced in THE JOURNAL, May 4, 1912, p. 1375. The clinics to be given are designed to be an epitome of medical progress during the last year, and are to be amply illustrated by lantern-slides.

In addition the committee has arranged for a set of clinics at Philadelphia for Monday, June 3, and Friday and Saturday, June 6 and 7, under the general control of Dr. John B. Deaver, Chairman of the Philadelphia Clinics. Other clinics will be given in Baltimore under the general charge of Dr. Thomas S. Cullen on the same days. Members in attendance at Atlantic City are urged to attend these clinics on their way home after the session of the Association.

CHARLES LOUIS MIX, Chicago.
Chairman of Committee on Clinic Days.

For the benefit of any interested in Atlantic City, especially any who may yet decide to attend the annual session, attention is here called to the full announcement, in the May 4 issue, concerning the city and its attractions, the entertainments, the railroad and hotel rates, the programs of each section, etc. Supplemental information has been given in this department since May 4 also. On registering at Atlantic City, one will receive full program, invitations, tickets, etc.

Marriages

JOHN MONAHAN, M.D., Fort Springs, Pa., to Miss Florence McGinty, of Tamaqua, Pa., at Philadelphia, May 14.

JONAS EDWIN S. MINNER, M.D., Egypt, Pa., to Miss Carrie Rodgers, of Allentown, Pa., in Reading, May 16.

J. A. MCNIVEN, M.D., to Mrs. Louise Savigny, both of Aberdeen, Wash., at Portland, Ore., May 11.

KENNETH BULKLEY, M.D., New York City, to Miss Gladys Clark Rogers, of Toronto, Ont., May 11.

DAVIS NATHAN, M.D., Norristown, Pa., to Miss Pearl Holben, of Schnecksville, Pa., recently.

CHARLES WESLEY HUTCHISON, M.D., to Miss Bernice Cook, both of Coalinga, Cal., May 12.

CLARENCE L. POLEY, M.D., to Miss Stella A. Bayne, both of Los Angeles, Cal., May 14.

LUCIEN C. DAVIS, M.D., to Miss Margaret Cattau, both of Shawano, Wis., May 10.

CLAUD JULIAN ALLEN, M.D., to Miss Fay Jopling, both of Rich Hill, Mo., May 7.

EDWARD L. REINECKE, M.D., to Miss Dollie Baynes, both of Dubuque, Ia., May 15.

MINA LOGUE FULLER, M.D., Adrian, Mich., and Mr. Peterson, of Chicago, recently.

VAN DYCK MCKELVEY, M.D., Denver, to Miss Clara Frank, at Omaha, May 8.

Deaths

William Joseph Asdale, M.D. Rush Medical College, 1866; a member of the Medical Society of the State of Pennsylvania, and the American Association of Obstetricians and Gynecologists; one of the founders of the West Penn Medical College, Pittsburgh; secretary of that institution until its consolidation with the Western University of Pittsburgh, and emeritus professor of diseases of women; for fifteen years a member of the medical staff of the West Penn Hospital, and a member of the consulting staff of the Passavant Hospital; for twelve years a member of the select council of Beaver Falls, and once its president; died at his home in Patterson Heights, Pittsburgh, May 19, from nephritis, aged 69.

Minor Franklin Clarke, M.D. Medical College of Virginia, Richmond, 1909; a member of the Medical Society of Virginia; died at his home in Clover, May 19, it is said from the effects of an overdose of bromidia, aged 30.

Daniel Jackson, M.D. Kentucky School of Medicine, Louisville, 1865; a Confederate veteran and medical cadet during the Civil War; a member of the Iowa State Medical Society and a member of its board of councilors; for many years a practitioner of Audubon; consulting physician to the Council Bluffs General Hospital; died in his home at Council Bluffs, May 13, 1912, from asthma, aged 65.

Elmer Ellsworth Briggs, M.D. New York Homeopathic College and Hospital, New York City, 1883; a member of the American Medical Association; formerly a practitioner of Pittsburgh and Watsonville, Cal., and assistant secretary of the board of health of the latter place; died suddenly in the Santa Rosa Hospital, May 15, 1912, while performing a surgical operation, aged 50.

Ferdinand C. Herff, M.D. University of Giessen, Germany, 1842; St. Louis College of Physicians and Surgeons, 1882; a member of the American Medical Association, formerly president of the West Texas Medical Society and an honorary member of the St. Louis Medical Society; a pioneer practitioner of Southwest Texas; died at his home in San Antonio, May 18, aged 91.

Charles William Dahlenburg, M.D. Miami Medical College, Cincinnati, 1906; a member of the Ohio State Medical Association; formerly local surgeon of the Lake Shore & Michigan Southern Railroad at Air Line Junction; assistant physician at the Toledo State Hospital; was found dead in his room in that institution, May 17, from heart disease, aged 29.

John J. Rice, M.D. Cincinnati College of Medicine and Surgery, 1881; a member of the Missouri State Medical Association; a member of the school board of Kearney and president of the Clay County Telephone Company and Clay County Life Association; died in St. Joseph's Hospital, Kansas City, May 12, after a surgical operation, aged 61.

Rollin Thomas Rolph, M.D. University of Buffalo, N. Y., 1873; formerly a practitioner of Dunkirk and Fredonia, N. Y., of Chula Vista, Cal.; for several terms health officer of Dunkirk, and at one time surgeon to a mining company at Flagstaff, Ariz.; died at the Agnew State Hospital, Cal., May 15, from pernicious anemia, aged 60.

Joshua Worley, M.D. Starling Medical College, Columbus, O., 1861; assistant surgeon of the 126th Ohio Volunteer Infantry throughout the Civil War; for many years a member and president of the board of education of Belle Plaine, Ia.; died at his home at that place, May 14, aged 78.

Samuel A. Hinton, M.D. Cincinnati College of Medicine and Surgery, 1864; a member of the Medical Society of Virginia; for many years a practitioner of Petersburg; died at the home of his son near New Orleans, May 16, 1912, aged 67.

James L. Husted (license, Ohio, 1896); a member of the Ohio State Medical Association; for thirty-six years a practitioner of Darke County; died at his home in Woodington, May 11, 1912, from arteriosclerosis, aged 75.

Steven Cary Henderson, M.D. University of Alabama, Mobile, 1887; a member of the Medical Association of the State of Alabama and a practitioner of Brewton; died at an infirmary in Mobile, May 10, 1912, aged 50.

Jacob Maximilian Lipschutz, M.D. College of Physicians and Surgeons, New York City, 1905; died suddenly at his home in Bronx Borough, New York City, May 9, from heart disease, aged 30.

Daniel Warren Scates, M.D. Jefferson Medical College, 1879; a member of the Tennessee State Medical Association; died in his office in Martin, Tenn., May 18, from cerebral hemorrhage, aged 57.

John Wesley Howard, M.D. Atlanta (Ga.) Medical College, 1891; a member of the American Medical Association; died at his home in Irondale, Ala., May 16, from cerebral hemorrhage, aged 53.

Samuel Hall Anderson, M.D. University of Maryland, Baltimore, 1870; a member of the Medical and Chirurgical Faculty of Maryland; died at his home in Woodwardville, May 17, aged 63.

Albert Pain, M.D. University of Toronto, Ont., 1906; of Fisherville, Ont.; aged 27; was a passenger on the *Titanic*, which was lost off the coast of Newfoundland, April 15.

William Duncan McNab, M.D. Trinity Medical College, Toronto, 1895; a veteran of the Riel Rebellion; died at his home in Toronto, May 14, from heart disease, aged 52.

Harry L. Reinhart, M.D. Starling Medical College, Columbus, Ohio, 1898; formerly coroner of Lawrence County, Ohio; died at his home in Ironton, May 13, aged 38.

The Propaganda for Reform

IN THIS DEPARTMENT APPEAR REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY AND OF THE ASSOCIATION LABORATORY, TOGETHER WITH OTHER MATTER TENDING TO AID INTELLIGENT PRESCRIBING AND TO OPPOSE MEDICAL FRAUD ON THE PUBLIC AND ON THE PROFESSION

TUBERCLECIDE

A Worthless Nostrum and Its Disreputable Promoter

At various times in the process of investigating and exposing "cancer cure" and "consumption cure" frauds, THE JOURNAL has called attention to the disreputable character of the individuals who are engaged in this business. The relation of personal character to commercial enterprise is, of course, not so much a matter of coincidence as of cause and effect. It is natural that individuals who would engage in such cruel and disreputable businesses as those of exploiting cancer and consumption cures should themselves be disreputable. There are, it is true, occasional well-meaning, unbalanced ignoramuses who really believe that they have discovered cures for these deadly diseases and who sell their nostrums under that honestly mistaken belief. Such cases are rare; so rare as to be negligible. Practically every individual who takes money from a consumptive, or from a sufferer from

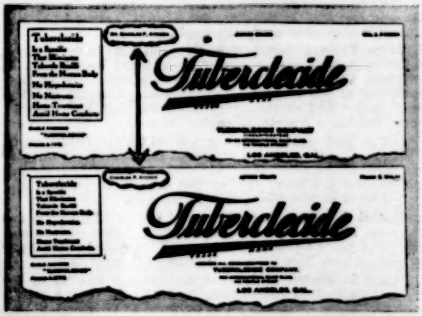


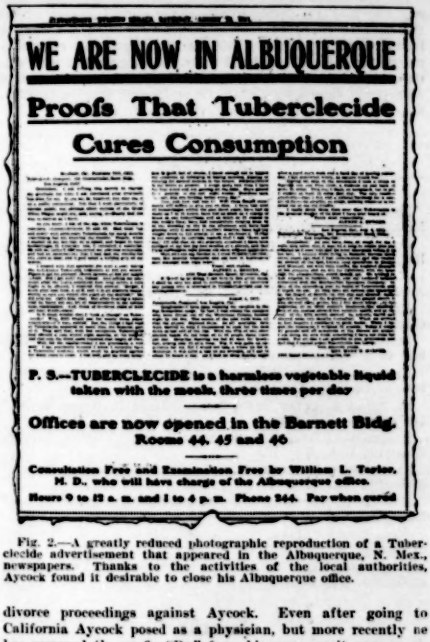
Fig. 1.—Photographic reproductions of the Tuberclecide Company's letterheads at different periods. It will be noticed that the older (upper) letterhead has Aycock as a "Doctor;" the more recent (lower) letterhead omits the fraudulently used title.

cancer, for a worthless nostrum sold as a cure for either of these diseases, knows that he is defrauding his victims just as truly as the highway robber knows that he is plundering the citizen whom he holds up at the point of a revolver.

SOME PERSONAL HISTORY

Tuberclecide is a fraudulent consumption cure sold by the Tuberclecide Company which has headquarters at Los Angeles and agencies in various southwestern states. The leading spirit of the concern and the reputed "discoverer" of Tuberclecide is one Charles F. Aycock. From the evidence at hand, Aycock seems to be just the type of man one would expect to find engaged in taking money from indigent consumptives under the fraudulent promise of a cure. A careful investigation seems to establish the following facts regarding Aycock: He was reared in Boone County, Arkansas, where he is said to have exploited, many years ago, a fraudulent catarrh cure. Even at that time, Aycock seems to have been able to fool the people successfully, as he was elected county treasurer. While holding this office, the people learned how foolish they were to trust a "patent-medicine" faker with other people's money, for Aycock is alleged to have embezzled over $2,900 of the county funds. A neighbor who, at the time, had some confidence in him went on his bond so as to permit Aycock to be at liberty until the trial. Aycock is said to have demonstrated his appreciation of this neighborly kindness by forfeiting his bail and fleeing from the state. For two and one-half years he seems to have kept out of the clutches of the Arkansas authorities but he was captured, it is said, as he was about to sell a fake gold mine.

The records show that Charles F. Aycock was sentenced to the penitentiary for five years on the charge of embezzlement. At the end of a year and a half he was pardoned, largely on the strength of a petition which his wife had circulated. Aycock again displayed his appreciation for help given, by deserting his wife and child soon after his release from the penitentiary. We next hear of him in Oklahoma where, although he had no medical education, he practiced medicine. After a while, Oklahoma seems to have become too hot for Aycock for he left for California where he organized the Tuberclecide Company. In the meantime he had married again, but two or three months ago the second wife began


WE ARE NOW IN ALBUQUERQUE

Proofs That Tuberclecide Cures Consumption

P. S.—TUBERCLECIDE is a harmless vegetable liquid taken with the meals, three times per day

Offices are now opened in the Barnett Bldg. Rooms 44, 45 and 46

Consultation Free and Examination Free by William L. Taylor, M. D., who will have charge of the Albuquerque office.

Hours 9 to 12 a. m. and 1 to 4 p. m. Phone 944. Pay when cured

Fig. 2.—A greatly reduced photographic reproduction of a Tuberclecide advertisement that appeared in the Albuquerque, N. Mex., newspapers. Thanks to the activities of the local authorities, Aycock found it desirable to close his Albuquerque office.

divorce proceedings against Aycock. Even after going to California Aycock posed as a physician, but more recently he has removed the prefix "Dr." from his name as it appears on the Tuberclecide stationery.

These details are given not for the purpose of raking up an ex-convict's past, but because Aycock is at present engaged in a much more villainous business than the embezzling of public funds or the selling of fake gold mines.

THE "CURE" ITSELF

Of Tuberclecide itself, THE JOURNAL[1] has already spoken. It comes as a pale-yellow, oily liquid for which $15 for a two-ounce bottle is asked. When examined in the Association's laboratory, the chemists reported that Tuberclecide is "essentially a solution of creosote or guaiacol in some bland oil, probably olive oil."

1. May 13, 1911; reprinted in "Nostrums and Quackery," p. 168.

V. 58
1912

About the time that Tuberclecide was exposed in THE JOURNAL, Aycock opened a branch office in Albuquerque, New Mexico, and at once commenced a vigorous advertising campaign. Fortunately for the consumptives of Albuquerque and vicinity, this town has an intelligent wide-awake layman who, recognizing the viciousness of Tuberclecide, took active steps to combat it. When he first opened the Albuquerque office, Aycock continued to give the impression that he was a physician, going so far as to have "Dr. Charles F. Aycock" printed on the company's stationery. It was not long before he was arrested on the charge of violating the medical practice act and although, owing to local conditions, he was not convicted he found it the part of discretion to omit the title "Dr." The notoriety that he gained in Albuquerque was such as to make him close that office and seek other fields where less was known about him.

THE ALLEGED GOVERNMENT TEST

Like other consumption cure fakers, Aycock attempted to get advertising ammunition by entering into correspondence with government officials relative to his nostrum. He wrote to the Secretary of the Interior and asked that official to turn over to him "six or eight patients who are in the last stages of tuberculosis" for treatment with Tuberclecide. Following this impudent request, newspaper advertisements were published—as reading matter—headed "Tuberclecide to be tested by United States Government." When Mr. C. S. Ucker, chief executive officer of the Department of the Interior, was written to regarding the truthfulness of the claim that the government was going to test Tuberclecide, the following reply was received:

> DEPARTMENT OF THE INTERIOR
> FREEDMAN'S HOSPITAL
>
> November 14, 1911.
>
> *Sir:*—By departmental reference I have a copy of your letter dated November 6, 1911, addressed to Mr. Ucker, regarding "Tuberclecide," and beg to state this office did not look with favor on the preparation, consequently took no notice of the same.
>
> Very respectfully,
> W. A. WARFIELD, Surgeon in Chief.

Of course, Aycock, being more rogue than fool, did not expect any action to be taken by the government and doubtless would have been greatly chagrined had his bluff been called. The important point, to him, was that he had been able to put his worthless nostrum before the public in such a light as to deceive credulous consumptives.

TESTIMONIALS

Of course Aycock publishes testimonials telling the wonderful results that have been accomplished by the use of Tuberclecide. There never has been a consumption cure fraud but could obtain all the testimonials that could be used. Some such testimonials are fraudulent; others—the majority—are honestly given by those who, in the optimism born of any new treatment, really believe at the outset that they are being helped. It is testimonials of this last class that make up one of the most tragic chapters of "patent medicine" frauds. As THE JOURNAL has shown time and again, it is only necessary in many an instance to wait a few months or a year to be able to publish side by side with the testimonial the death certificate of the poor victim who gave it.

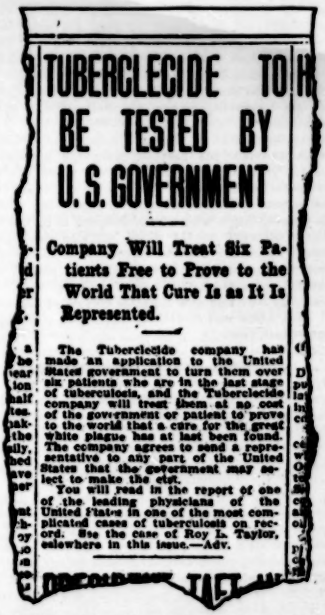
The following brief record gives the names of a few individuals who have taken Tuberclecide but about whom the exploiters of this fraud are careful to say nothing:

Case 1.—H. Wenzell took twelve bottles. Worse.
Case 2.—J. M. Horner took five bottles. Died August 20, 1911.
Case 3.—F. Allen took four bottles. Died July 7, 1911.
Case 4.—A. J. Imel took two bottles. Died June 6, 1911.
CASE 5.—J. D. Hoyt took two bottles. Worse.
Case 6.—J. Goldfinger took one bottle. Worse.
Case 7.—W. Porterfield took one bottle. Died March 2, 1912.

CONCLUSION

So much for Tuberclecide. That a mixture of guaiacol in olive oil will not cure tuberculosis, every physician knows. In fact, if the public were informed of the composition of Tuberclecide, it would be impossible to sell this preparation either at the exorbitant price that is asked for it—$15 for two ounces—or at practically any price.

There is a ghastly sameness in the description of various consumption cure frauds. Exploited in nearly every case by men who are as lacking in professional training as they are in moral responsibility, "these cures" are sold under claims that are grossly false and with an utter disregard of the most elementary canons of commercial honesty. The same tragedies of money wasted that can be ill-spared, of time squandered



TUBERCLECIDE TO BE TESTED BY U. S. GOVERNMENT

Company Will Treat Six Patients Free to Prove to the World That Cure Is as It Is Represented.

The Tuberclecide company has made an application to the United States government to turn them over six patients who are in the last stage of tuberculosis, and the Tuberclecide company will treat them at no cost of the government or patient to prove to the world that a cure for the great white plague has at last been found. The company agrees to send a representative to any part of the United States that the government may select to make the test.

You will read in the report of one of the leading physicians of the United States in one of the most complicated cases of tuberculosis on record. See the case of Roy L. Taylor, elsewhere in this issue.—Adv.

Fig. 3.—This is one of the advertisements issued by Aycock at the time that he attempted to get advertising ammunition by writing a letter to the federal authorities making an offer which he knew could not be accepted and which he, in fact, would be the last to want to have accepted.

that can be spared still less, of the occasional testimony favorable to the preparation given at the beginning of the "new treatment" and, finally of the same depressing death lists.

And thus it goes. Under our present insufficient laws, there is no way of halting this slaughter of the innocents. So long as men, immoral or unmoral, see fit to enrich themselves on the blood-money of the consumptive, there is nothing to prevent them so doing except the tediously slow process of educating the public to realize the utter worthlessness and potential danger of every consumption cure.

JOURNAL Announcements, Knocks and Boosts, Books Received and changes in the Public Service will be found in the advertising section, commencing on the second page following reading matter.

Correspondence

The New Section on Hospitals

To the Editor:—We would like to say a few words in The Journal, just on the eve of the annual session, calling the attention of the profession to the new Section on Hospitals, which is to undertake its first program at Atlantic City this year.

Hereafter the Section will speak for itself through its work, but just at this particular time when its functions and its scope cannot be known to the profession in general, we feel that there should be a genuine and hearty support of its work for the following reasons, among others:

The hospital, under the new dispensation, is no longer merely a place for the care of patients who cannot be cared for at home; it is a place to which all sick people, who need the facilities provided by scientific modern medicine for the diagnosis and treatment of disease may get a better chance to get well than they could have in even the most luxurious home. There are, perhaps, 50,000 medical men who do all, or a large part, of their work in the hospitals of the country and who are, therefore, deeply interested in the welfare of the hospitals and who are greatly in need of all the information they can get concerning modern hospital methods, equipment and operation.

There is the American Hospital Association, whose chief interest is to view the hospital from the administrator's standpoint. This is doing most excellent work in this field, and is responsible in no small measure for the rapid improvement in hospital administration in the past few years, but there is no association whose chief interest is in the hospital from the standpoint of the physician who does his work there, and who is, therefore, to be considered the chief factor of interest in the hospital, if we except the patient himself.

It was to represent the physicians' interest in the welfare of the hospital that this new Hospital Section of the American Medical Association was created by the House of Delegates at Los Angeles last year.

The Section, we believe, has as good a program as could be created at the outset of its career; the papers to be read and the subjects to be discussed all touch the very quick of the physicians' interest in the hospital, and we cherish the hope that the profession will support the new Section as one demanded by this modern day.

This year the chairman's report will show the actual status from the physicians' point of view, in the matter of scientific equipment, of the hospitals of the country, not only for the purpose of taking care of the sick, but in regard to teaching facilities for nurses and interns, and material for medical staffs.

If this work shall prove satisfactory and shall receive that amount of encouragement that all human beings must receive in order to be effective and efficient, it is proposed next year to go another step and begin the classification and standardization of the hospitals in order to set high-water marks for the ambitious, and for those who are trying their best to meet the obligations of the present and the hopes of the future.

We believe that this program will eventually result in high standards in hospitals, large and small, and that one of its most useful purposes will be to make lighter and easier the labors of the practitioner of medicine.

W. B. Russ, Chairman, San Antonio, Tex.;
John Allan Hornsby, Secretary, Chicago,
Section on Hospitals.

Sanatogen and the Burden of Proof

To the Editor:—I have been much interested in your recent explanations concerning Sanatogen. The great volume of advertising that the makers of this article are putting forth, the skill with which the advertisements are written and the apparently commonplace character of the substance itself, seem all matters of remark. I have noted the reply of the manufacturers to your criticism, and one point strikes me as of great importance and not brought out prominently in your reply. The manufacturer declares that the product is a compound of casein with the glycerophosphate. What proof is offered of this? Where are the laboratory data that show such a condition? The mere fact of close association does not constitute combination. It is generally thought that in normal milk some of the protein constituents—most likely the casein—are in some closer union than mere admixture with the phosphates, but in the light of modern colloidal chemistry, this association may be regarded as due to "adsorption," a special term which has been coined to cover the peculiar action of colloids in attracting other substances. It does not seem probable that artificially prepared materials could be made to exhibit this phenomenon, but under any circumstances surely the burden of proof is on those who assert that such a combination exists. No dogmatic, unsupported statement can have scientific standing. If we were to adopt such methods we would be back to days of old when an accused person was acquitted if he could bring a certain number of his neighbors to swear that they considered him innocent.

Henry Leffmann, Philadelphia.

Synthetic Food and Artificial Nutrition

To the Editor:—As one who takes more than a passing interest in The Journal and its editorials, and derives not a little recreation from their perusal, may I be allowed to pen a few words in regard to your recent editorial on the above subject?

One contemplates with almost a feeling of awe the researches of Prof. Abderhalden, as he reduces nutrition to elemental simplicity—feeding his animals on amino-acids, glycerol, fatty acids, etc., with satisfaction to himself, and, doubtless, with gratification to his subjects.

From the standpoint of the physiologist, such experiments must be of intense interest, but when one leaves the scientific atmosphere of the laboratory and emerges again into the realms of every-day work and responsibility, one cannot help wondering where the utility of such work will be. Are we to feed our patients on tabloid nutrition, and will the physician, when diagnosing his patient's condition, write out a prescription in which his nourishment will be dispensed in an 8-ounce bottle, a tablespoonful t. i. d., or perhaps order some "proprietary" dinner capsules, as the case may be? When such a point is reached, it will not be improbable to suppose that life will have lost much of its interest. Of course, as the professor remarks, it is only a matter of cost. One might argue from this that "the simple life" will be another factor for the high cost of living.

Sir James Crichton Browne, in a recent article published in the *Tribune*, London, contended that in invalid-feeding it was of utmost importance that good flavor and good aroma should prevail, for nice food is more easily assimilated than that which is flavorless, while Jacobi has said, with much truth, that a child's stomach cannot be compared with a test-tube. He might go farther and say the same of an adult's.

It is evident, however, that the day is not far distant when dietetics will be reduced to an exact science, and will, as they ought to do now, form part of the curriculum of medical education, instead of being treated as at present, in many schools, in a rather cavalier fashion.

One danger of predigested foodstuffs is in those very cleavage products, for the line between digestion and decomposition is a very narrow one, and it does not need a great stretch of imagination to conceive the result of the administration of such foodstuffs in pathologic conditions.

Those who have the care of the sick find that idiosyncrasy is an important factor, for, from the pharmaceutic standpoint, it is of the utmost importance that prescriptions should be dispensed, not only in consonance with the art of dispensing, but also with a view to influencing the mentality of the patient, from an appeal to the senses. I know many pharmacies where it is as much as the clerk's place is worth to send out a prescription that is carelessly finished. What is true in the administration of drugs, how much more must be so, in

V. 58
1912

the administration of foods. The appeal to the senses of sight, taste and smell cannot be overlooked, so that I fear for many years at any rate we must utilize those methods that time and experience have proved efficacious and useful.

It might be interesting to carry the discussion further, for, as Sam Weller once remarked, "Much might be said on both sides."

W. BOULTON CONYNGHAM, PH.C.E., M.A.P.A., F.C.S.E., New York

[COMMENT.—We quite agree with our correspondent regarding the current neglect of the study of dietetics in the average medical curriculum, and the importance of fostering a more wholesome interest in this subject among the profession. When, however, he attempts to draw a distinction between the utility of scientific investigation and "every-day work" in medicine, we protest against an erroneous point of view which has been one of the chief obstacles to the very progress which he advocates, namely, that toward rational dietotherapy. No one who follows the contributions of science in these times can fail to recognize that the laboratory knowledge of to-day may become the clinical procedure of to-morrow. The practical man of medicine needs above all to breathe the "scientific atmosphere of the laboratory," and to benefit from its invigorating properties. For this reason we aim to discuss in our editorial and current comment columns just such recent additions to scientific knowledge as the topic which has aroused our correspondent's interest. It matters little whether or not we shall be able to simplify human nutrition in precisely the way that Abderhalden succeeded in animals. The fundamental point is that the success of his experiments gives the clue to the underlying principles of nutrition—to the fact that the organism can actually synthesize its important constituents. Until we learn the chemical processes of which the body avails itself in metabolism, much of our applied dietetics must remain purely empirical in form. Our correspondent fears a physiologic confusion of decomposition products with the digestion products; but such danger exists only so long as science is ignorant of the facts. The possibilities of the newer knowledge of the laboratory must be translated into practice and there made effective. As Professor Ewing has appropriately remarked in another connection, "The feeding of healthy man, as well as the diet of the sick, cannot be left to chance, guided by appetite or ruled by tradition, but can be safely directed only according to the laws of digestion and metabolism."—ED.]

Vegetarianism

To the Editor:—Vegetarianism is based on sentiment and is supported by scientific evidence. Sentiment springs from the fundamental make-up of the individual. When not modified and restrained by education and reason it produces undoubtedly a lack of balance and of proportion in understanding. A like danger lurks in the path of intellect which falls into repulsive generalizations when it attempts to understand the world of feelings by the help of the physical sciences alone. Vegetarianism is mostly an effort to reduce the total amount of suffering and to stay the enormous destruction of animal life for no benefit to the human race. Philosophically it accepts the idea that animals have a *raison d'être* apart from us and a right to be allowed to live their lives as long as they are not destructive to our own. It is not illogical for vegetarians to use milk and eggs, as these animal products are distinctly less toxic than meat and also less likely to be disease-laden. They are obtained with a minimum of suffering on the part of the animals which furnish them to us.

All vegetarians should realize that any one combination of vegetable foods may lack some element that is important to the perfect working of our organism; that possibly a certain amount of animal protein, in the form of milk and egg, in our food makes a more perfect diet. I say "possibly" because no absolute proof is at hand. But with a moderate point of view it is better to use some animal food unless one is bent on making an experiment. For the present, the essential part of the vegetarian doctrine and that which is based on the largest amount of scientific evidence should be that meat is an unnecessary, a toxic, and at times a dangerous food; that we can supply ourselves with the modicum of animal food that we may possibly need by the use of milk and eggs.

The question of the absolute need of proteins is still open. Some unknown substances are taking the lead in the interest that the proteins had. So far as I know no one has demonstrated exactly what is the thing in lime-juice which prevents and cures scurvy. It will be difficult, if it is ever attempted, to prove what it is in corn-fodder and grain which makes it a better food for cows. One of the standby arguments against a low-protein diet, the improvement alleged to follow a higher one on the incidence of beriberi, has taken a transfer for oblivion. The dread disease is prevented and cured by a dializable body found in rice polishings. The conclusion is that there are food elements still unknown and undefined that are of very great importance in feeding; that those elements are not proteins; that they may be found in vegetable as well as animal foods, and that they constitute a chapter of physiology yet unwritten. I do not think it is unscientific to argue that there is a possibility of a lack of such a substance in the vegetable diet that sustained so poorly the albino rats of the Stanford University experimenter (THE JOURNAL, May 4, 1912, p. 1377).

A mistake that some vegetarians make is to discard with the meat all condiments and stimulants that they were in the habit of taking. It is possible that there is a physiologic need for a moderate amount of stimulants. It may be that some substances have a specific action very necessary for a normal metabolism—an action that is perhaps more like that of an enzyme than that of a food.

It is a very small mind that does not think that he may be mistaken. Vegetarians may have much to learn and some of them may be very misguided, but they are often essentially different from their critics. They are experimenting with their ownselves in matters that may be of great value to the human race. If they fail to develop admirable bodies the world will recognize their spirit and be the better for it. The vegetarians sha.. live.

J. L. BUTTNER, M.D., New Haven, Conn.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

TREATMENT OF DOUBLE TALIPES EQUINOVARUS IN THE NEW-BORN

To the Editor:—What is the recognized present-day treatment of double talipes equinovarus in new-born infants? What is the prognosis when treated by apparatus, plaster, cutting operations or a combination of these? E. L.

ANSWER.—As a rule orthopedists do not treat congenital talipes equinovarus in the new-born infant, preferring to wait until the child has learned to walk. This is because of the difficulty in holding the fat feet of a very young child straight until they stay straight. But in some cases in which the deformity is not very severe and in which it is possible to treat the child frequently and for two or more years, treatment is begun early by stretching with the hands and by retention of the feet in plaster splints. It is better not to operate in a case of this kind until the child has learned to walk, although some orthopedists operate early.

In many cases the deformity can be overcorrected (and it ought always to be overcorrected) by modeling with the hands over Koenig's block. In a considerable number of cases, however, it is necessary to divide the posterior tibial tendon and much of the anterior part of the inner lateral ligament of the ankle-joint by a subcutaneous tenotomy to overcorrect the varus. This should be done first, and then a tenotomy of the Achilles tendon and a stretching or tearing of the posterior ligament of the ankle-joint for the overcorrection of the equinus. If one operates in this way on a very young patient the ankle will sometimes bend or break at the lower epiphyses of the tibia and fibula before the posterior ligament can be made to give way. The after-treatment is by plaster splints until the feet stay straight.

In some older cases and in relapsed cases (which are more difficult to treat than cases that have had no treatment), a

skiagram will show a wedge-shaped astragalus that demands an enucleation of that bone. A prominent orthopedist, whom we have consulted on this case, says that he has neither done nor seen a Phelps operation for more than twenty years nor a cuneiform osteotomy for more than thirty years; nevertheless he has heard of these operations having been done by general surgeons. He knows of no brace that can be used successfully in the cure of congenital club-foot, but braces may be used to hold a foot straight after an operation, or the use of plaster splints for some months, provided it is easy to hold the foot straight. If the foot shows much of a tendency to relapse, braces should not be used; plaster splints are more dependable. All cases of congenital club-foot can be cured. Some may best be treated one way and some another way. The duration of treatment may be as short as four months or longer than four years. A patient is cured only when the foot stays straight. Intelligent and skilful after-treatment is more essential than this or that method of straightening the foot.

HEAT CRAMP

To the Editor:—Please give me a list of articles on the effects of heat on the human system in men engaged in working in hot places, such as blast furnaces, deep mines, etc.

For years employees of the Tamarack mine have been having seizures characterized by a set of curious symptoms: intense muscular cramps, profuse perspiration, great thirst, and weak but not very rapid heart. The exhaustion has been marked; but no rise in temperature, which is generally subnormal. There has been one death; no autopsy was allowed.

A. I. Lawbaugh, Calumet, Mich.

Answer.—Attention was called to this condition by D. L. Edsall (*Am. Jour. Med. Sc.*, December, 1904; The Journal, Dec. 5, 1908, p. 1969; also by Elliott, *Mil. Surgeon*, March, 1908), and since then there have been the following communications on the subject:

Welsh, H. M.: Muscular Spasm Due to Muscular Exertion in a Heated Atmosphere, The Journal, April 10, 1909, p. 1179.
Cameron, W. H.: A Disorder Due to Exposure to Intense Heat, The Journal, May 8, 1909, p. 1483.
Clendening, L.: Muscular Spasms Due to Heat in Cooks on Pullman Diners, The Journal, May 7, 1910, p. 1517.

The condition which depends on the combination of intense heat and hard work is more frequent in summer than in winter; it is likely to come on more quickly if rest between periods of exertion has not been obtained. It is favored by individual predisposition. While most of the patients are drinkers, some are total abstainers, so that it is probable that alcohol plays a minor part in the etiology. One attack seems to predispose to others. The patients usually state that they had not been feeling well before the exposure during which they were attacked. The temperature of the steel-mills in which many of the cases occur is said by W. H. Cameron to vary from 140 to 235 F. The principal symptom is muscular cramps which may affect either the smaller muscles or the larger muscles of the extremities and sometimes the abdominal muscles. In Dr. Edsall's cases the cramps were preceded by a condition of muscular fibrillation. In a well-developed case the cramps may occur every two or three minutes, the interval increasing later to ten minutes. They are accompanied by severe pain and by a dilated pupil. The attacks vary greatly in severity. The temperature is not raised and the pulse is seldom much affected, although the heart is said to be weak. The spontaneous spasms usually subside within twenty-four hours or a little more and no symptoms then remain, except slight exhaustion and some muscular soreness. The experiences of the patients have shown that a sudden slapping of the muscle will cause a relaxation of the spasm. The diagnosis is made from the symptoms, and the condition appears to be limited to the muscles, evidence of disease of other organs being entirely absent. The differential diagnosis is given as follows by W. H. Cameron (The Journal, May 8, 1909, p. 1484): "In all other conditions, presenting muscular twitchings, contractions or spasms (strychnin poisoning, epilepsy, uremia, hysteria, etc.), such twitchings, contractions or spasms are, as a rule, in proportion to the amount of toxemia or morbid condition present. Now, if this toxemia or morbid condition (whatever its character) were present in sufficient amounts to cause the intense myospasms present in these cases, then surely it would be present in sufficient amounts to affect all the voluntary and at least some of the involuntary muscles, and to affect materially the mental, nervous or circulatory systems. That this condition differs from all other recognized conditions due to exposure to heat is shown by the fact that there is absolutely no thermal disturbance."

The prognosis is usually good but a considerable number of deaths have been said to occur. Morphin is recommended for the relief of the pain. According to H. M. Welsh (The Journal, April 10, 1909, p. 1179), apomorphin in doses varying from 1/12 to 1/20 grain will produce immediate relaxation and he has employed this remedy with repeated success in the severer cases. For the milder cases warm baths are recommended to relax spasm.

A brief note of the condition is found in Anders' "Practice of Medicine."

RESOR-BISNOL

To the Editor:—Has the Council on Pharmacy and Chemistry ever examined Resor-Bisnol, made by the Resor-Bisnol Chemical Company? If so, will you please publish its formula. I think the advertisements used to give the formula, but those I have seen lately give no clew to its composition.

W. C. W.

Answer.—Resor-Bisnol was considered by the Council and refused recognition. The following formula for Resor-Bisnol was at one time given in advertisements in a number of medical journals:

"A scientific combination, in nicely balanced proportions of Bismuth Salts of antiseptic acids of the aromatic series, and Resorcin.
"Each 100 parts contains 20 parts Resorcin, and 52 parts Bismuth Oxid, combined with antiseptic acids."

Besides this formula other "formulas" equally indefinite, vague and misleading have been given in lieu of an actual statement of composition, thus:

"——— is a mixture of resorcin and bismuth salts of phenic acids such as salicylates, etc., and an aromatic alcoholate. Its composition is as follows:

Bismuth salts of phenic acids.....	60 per cent.
Aromatic alcoholate of bismuth...	20 per cent.
Resorcin	20 per cent."

The product was recently analyzed in our chemical laboratory. The chemists report as follows:

"A specimen of Resor-Bisnol examined by us consisted of a light brown powder possessing a characteristic odor and a taste at first sweetish and then bitter. It was found to be only partially soluble in water. The examination indicates that Resor-Bisnol is probably a mixture consisting essentially of a basic bismuth salicylate (bismuth subsalicylate), a basic gallate of bismuth (bismuth subgallate), a basic compound of beta-naphthol (bismuth betanaphtholate) and resorcinol (resorcin)."

It thus appears that Resor-Bisnol is probably a simple mixture of well-known substances. In other words, the Resor-Bisnol advertising and literature are typical of that issued by various nostrum houses: it conceals the truth in a mass of semi-scientific verbiage, and while not frankly false, it deceives by what is left unsaid rather than by what is said.

LIGATION OF DORSAL VEIN OF PENIS FOR PROSTATIC HYPERTROPHY

To the Editor:—Is the ligation of the dorsal vein of the penis a recognized procedure for the relief of prostatic hypertrophy? Can you refer me to any literature relative to such an operation with this object in view?

W. W. Spargo, Albuquerque, N. Mex.

Answer.—As far as we can learn, the ligation of the dorsal vein of the penis has never been done for the relief of prostatic hypertrophy. It was done a few times a short time ago for the relief of impotence but with such poor results that it has fallen into disuse.

WHY GOLD BLACKENS THE SKIN

A correspondent (The Journal, April 27, 1912, page 1299) asked why a ten-carat gold chain blackens the neck, and furthermore, why this occurs on some persons and not on others. J. R. Wood & Sons, jewelers, New York, are kind enough to inform us for the benefit of those interested in this subject that some time ago they had this matter investigated —particularly with reference to gold rings—and received the following answer:

Under certain conditions, when worn either in contact with or close to the skin, gold is apt to produce a blackening. This condition was found to be true in 14-carat, 18-carat and pure gold. In fact, it is most apparent in pure gold, and is not due to any particular properties of the gold but rather is the result of chemical changes in the body.

While it is true that an excess of sulphur in the air and deposited on the skin, or an excess of sulphur in the body, will produce a blackening of the skin under gold rings, the cause for the great majority of blackening of the fingers is the oil of the skin, or the oil in ointments such as cold cream,

V. 58
1912

etc., if not thoroughly washed off. Oil contains more or less oleic acid which, with friction and in contact with gold, produces a chemical deposit or oleate of gold, which is deposited in minute quantities on the surface of the skin and which is black in color. Rings which are loose will create this condition quicker than those that are tight.

If you desire a simple experiment, take a drop of oil, place it on a small piece of cotton and rub vigorously any gold surface; the oleate of gold is deposited and blackening is immediately discernible.

THROMBUS—VARICOSE VEINS—SYNOVIAL SACS

To the Editor:—I have observed, in a female patient, a case of thrombus in superficial veins of the lower leg, about 3 or 4 inches in length, which has become acutely inflamed after each delivery, during the last six years. Would there be any great danger in tying off one-half inch above and below the thrombus and removing the hard mass under aseptic conditions?

2. What is the most approved operation for varicose veins of the saphenous veins?

3. What is the most approved treatment for filling up of synovial sacs of the knee (with synovial fluid) one month following a fall on knee-cap?

L. T. A. HOTTENDORF, M.D., Bloomington, Idaho.

ANSWER.—1. There would be no danger in removing the enlarged veins; in fact that would be the proper treatment. Do not try simply to remove the thrombus, should one be present, but remove the enlarged veins.

2. The most approved operation for varicose veins of the leg was described in THE JOURNAL (Dec. 10, 1910, p. 2080), in answer to a similar query.

3. The knee should have rest and immobilization in a cast for two or three weeks. If at the end of that time the fluid is not all absorbed, the joint may be aspirated and a few cubic centimeters of a 2 per cent. dilution of liquor formaldehydi in glycerin injected and the joint again immobilized. If recovery does not follow this treatment, some injury to some of the joint structures was undoubtedly produced which would call for special treatment, depending on the character of the injury sustained.

ALKALINE URINE AND HEXAMETHYLENAMIN

To the Editor:—In the therapeutic department of THE JOURNAL (April 13, p. 1115), in discussion of enuresis, you say that "if the urine is alkaline this should be remedied by the administration of a drug to render it acid," and later say that hexamethylenamin should be given. If the alkalinity be due to putrefaction I can approve of the drug suggested, but how can hexamethylenamin reduce the alkalinity of the urine?

H. M. FRANCIS, Gilbert, Minn.

ANSWER.—It is a clinical fact that hexamethylenamin increases the acidity of the urine. So far as we know, there is no simple chemical explanation for this action.

Medical Economics

THIS DEPARTMENT EMBODIES THE SUBJECTS OF POST-GRADUATE WORK, CONTRACT PRACTICE, LEGISLATION, MEDICAL DEFENSE, AND OTHER MEDICOLEGAL AND ECONOMIC QUESTIONS OF INTEREST TO PHYSICIANS

SENATOR SMOOT INTRODUCES A NEW HEALTH BILL

In a previous issue of THE JOURNAL[1] the text of Senate Bill 5972 introduced by Senator Smoot was given in full. This bill provided for a change in name of the present Public Health and Marine-Hospital Service to United States Public Health Service, for the transfer of the Division of Vital Statistics of the Bureau of the Census from the Department of Commerce and Labor and for the creation of a Division of Sanitary Engineering and a Division of Child Hygiene. It also provided for an assistant secretary in the Treasury Department to be designated as the Assistant Secretary for Public Health who should have charge of the administration of the Public Health Service.

On May 11, Senator Smoot introduced Senate Bill 6782, evidently intended as a substitute for his first bill. The text of the new bill is given herewith. Its provisions are, in the main, the same as Senate Bill 5972, the chief difference being that the new bill does not provide for a Bureau of Child Hygiene, or for an Assistant Secretary for Public Health. Under the new bill, the United States Public Health Service is to be under the charge of the surgeon general of that service, and each of the divisions to be in charge of an assistant surgeon general. The new bill also specifically authorizes the public health service to study the question of pollution of navigable streams and water. It also continues the Advisory Board of the Hygienic Laboratory. The text of the bill follows:

1. THE JOURNAL, April 6, p. 1054

A BILL TO ESTABLISH A PUBLIC HEALTH SERVICE, AND FOR OTHER PURPOSES

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Public Health and Marine-Hospital Service of the United States shall hereafter be known and designated as the United States Public Health Service, and in addition to the administrative divisions now authorized by law there is hereby created a Division of Sanitary Engineering, and the Division of Vital Statistics of the Bureau of the Census is hereby transferred from the Department of Commerce and Labor and made a division of the United States Public Health Service: *Provided*, That nothing in this act contained shall be held or construed to discharge or reduce in rank, grade, or pay any officer or employee of the Public Health and Marine-Hospital Service or the Division of Vital Statistics of the Bureau of the Census: *And provided further*, that the Division of Sanitary Engineering shall be in charge of a competent sanitary engineer, who shall be appointed in the same way and receive the same compensation as the chiefs of division of the Hygienic Laboratory.

SEC. 2. That all laws pertaining to the Public Health and Marine-Hospital Service of the United States or the Division of Vital Statistics of the Bureau of the Census shall hereafter apply to the United States Public Health Service, and all regulations of the former now in force or made hereafter shall apply to and remain in force as regulations of the United States Public Health Service until changed or rescinded: *Provided*, That this act shall not be construed as attempting to authorize the United States Public Health Service to exercise or attempt to exercise, without express invitation from the chief executive or other proper authority of the state, any function belonging exclusively to such state, or to enter any premises without the consent of the owner or occupant thereof; and the United States Public Health Service shall have no power to regulate the practice of medicine or the practice of healing, or to interfere with the right of a citizen to employ the practitioner of his choice, and all appointments within the United States Public Health Service, including the head of that service, shall be made without discrimination in favor of or against any system of medicine or of healing: *Provided further*, That all properties, records, and rights pertaining to or in the possession of the Public Health and Marine-Hospital Service of the United States or the Division of Vital Statistics of the Bureau of the Census are hereby transferred to and shall be available for use for like purposes and in like manner by the United States Public Health Service.

SEC. 3. That the United States Public Health Service shall, under the Secretary of the Treasury, be under the charge of the surgeon general of the aforesaid service, who shall be appointed as now provided by law and regulations, and the several divisions of the said service, with the exception of the Division of Sanitary Engineering, shall each be in charge of an assistant surgeon general, as now provided by law for the Public Health and Marine-Hospital Service: *Provided*, That the present Chief of the Division of Vital Statistics of the Bureau of the Census shall be appointed by the President, by and with the advice and consent of the Senate, as a surgeon in the United States Public Health Service.

SEC. 4. That all matters relating to personnel and accounts of the United States Public Health Service shall be administered by the Division of Personnel and Accounts of the said service, and all accounts of moneys received and moneys expended on account of the said service shall be examined by the Auditor of the Treasury and so certified by that officer: *Provided*, That there may be employed in the United States Public Health Service such help as may be provided for from time to time by Congress.

SEC. 5. That the United States Public Health Service may study and investigate the sanitation and sewage and the pollution, either directly or indirectly, of the navigable streams and lakes of the United States, and it may from time to time issue information pertaining thereto in the form of publications for the use of the public.

SEC. 6. That the advisory board of the Hygienic Laboratory, in addition to its duties as now defined by law, shall, while in conference, consult and advise with the Surgeon General of the United States Public Health Service with respect to matters relating to the public health.

POSTGRADUATE COURSE FOR COUNTY SOCIETIES

Tenth Month—Third Weekly Meeting

MOVABLE KIDNEY[1]

ETIOLOGY: Sex, age, right side. Emaciation, multiple pregnancies, lacing, traumatism, renal tumors. Enteroptosis.

DIAGNOSIS: General symptoms. Dietl's crisis. Physical examination. Movable kidney, floating kidney. Differentiate from tumor of gall bladder, from wandering spleen, from ovarian or intestinal tumors. Differentiate Dietl's crisis from renal, hepatic or intestinal colic, appendicitis, acute obstruction of bowel.

ACUTE NEPHRITIS

PATHOLOGY: Gross changes slight or extreme. Microscopic changes (a) in glomerulus, (b) in tubular epithelium, (c) interstitial changes.

SYMPTOMS: Onset, chill, fever, pain, gastric disturbance, dropsy,[2] puffiness and convulsions. Urine; quantity, specific gravity, color, reaction, albumin, microscopic examination. General symptoms: Edema, ascites, hydrothorax, hydropericardium; pulse and heart, blood; uremic manifestations. Variations in clinical course. Duration, terminations.

CHRONIC PARENCHYMATOUS NEPHRITIS

DEFINITION AND SYNONYMS

ETIOLOGY: Age and sex. Secondary to acute nephritis; alcoholic and malt liquors; association with amyloid disease in syphilis, tuberculosis and chronic suppurations.

PATHOLOGY: Gross and microscopic changes in (a) large white kidney, (b) small white kidney, (c) kidney of chronic hemorrhagic nephritis.

TREATMENT: Dietetic, eliminative. Anemia, heart and pulse. Dropsy. Dechloridation.[3] Diuretics.

1. Progressive Medicine, December, 1905.
2. Bainbridge: Practitioner, December, 1905.
3. Javal: International Clinics, 1905, iv

Society Proceedings

COMING MEETINGS

AMERICAN MEDICAL ASSOCIATION, Atlantic City, N. J., June 4-7.

American Academy of Medicine, Atlantic City, May 30-June 2.
Amer. Assn. of Genito-Urinary Surgeons, Philadelphia, June 7-8.
American Association of Medical Examiners, Atlantic City, June 3.
American Climatological Association, Hartford, Conn., June 10-12
American Gastro-Enterological Association, Atlantic City, June 3-4.
American Neurological Association, Boston, May 30-June 1.
American Ophthalmological Society, Atlantic City, June 12-13.
American Orthopedic Association, Atlantic City, May 30-June 1.
American Otological Society, Atlantic City, June 10-11.
American Proctologic Society, Atlantic City, June 3-4.
American Society of Tropical Medicine, Atlantic City, June 3.
American Therapeutic Society, Montreal, May 31-June 1.
Maine Medical Association, Portland, June 12-13.
Massachusetts Medical Society, Boston, June 11-12.
Michigan State Medical Society, Muskegon, July 10-11.
National Association for Study of Epilepsy, Vineland, N. J., June 3.
New Jersey Medical Society, Spring Lake, June 11-13.
North Carolina Medical Society, Hendersonville, June 18-20.
Rhode Island Medical Society, Providence, June 12-13.
Washington, Idaho and Oregon associations, Portland, July 5-8.

ILLINOIS STATE MEDICAL SOCIETY

Sixty-Second Annual Meeting, held at Springfield, May 21-23, 1912

The President, DR. W. K. NEWCOMB, Champaign, in the Chair

Officers Elected

The following officers were elected: president-elect, Dr. Charles J. Whalen, Chicago; vice-presidents, Drs. S. E. Munsen, Springfield; W. H. Curtis, Wilmington; secretary, Dr. E. W. Weis, Ottawa; treasurer, Dr. A. J. Markley, Belvidere; delegates to the American Medical Association, Dr. George S. Rainey, Salem; Dr. A. L. Brittin, Athens; Dr. A. C. Cotton, Chicago; Dr. William L. Noble, Chicago; Dr. John A. Robison, Chicago; Dr. E. W. Fiegenbaum, Edwardsville; Dr. J. T. Montgomery, Charleston; alternates, Dr. G. L. Armstrong, Taylorville; Dr. R. J. Coultas, Mattoon; Dr. E. Baur, Chicago; Dr. A. S. Hanna, Peoria; Dr. K. Zurawski, Chicago; Dr. A. B. Middleton, Pontiac, and Dr. H. A. Millard, Minonk.

Peoria was selected as the next place of meeting.

Oration on Surgery: Essential Factors in the Development of Surgery

DR. DUDLEY P. ALLEN, Cleveland: The conditions which will tend to the development of surgery are briefly these: broad, accurate preliminary training; in professional study a thorough knowledge of all general subjects, especially those of anatomy, pathology and medicine; thorough training in surgical anatomy, pathology and diagnosis; an intelligent knowledge of all special departments, in order that complicating diseases may be recognized. This much is essential. None but a school of the first grade can give it. No school can do more than this in four years. The influence of the entire medical profession should be in favor of medical schools of the highest standards. Training toward specialism should await postgraduate study. After graduation, hospital training is indispensable, and the man is fortunate when the various services of the hospital work are in such sympathetic association as to give the assistants, not to mention the chiefs, the benefit of mutual observation. Subsequent study in other hospitals of this country and Europe is greatly to be desired. The profession should show its approval of men of long training, high scientific attainment, and correct and honorable methods, by seeking in counsel such men and such men only and by discountenancing the pretensions of all others who do not measure up to this standard. The aim should be to develop hospitals of the highest grade, and to train assistants through a prolonged service to thorough competency. A surgical service under a single chief has great advantages, and should rightfully entail great responsibility. Assistants trained in such a service would be fitted to occupy responsible positions in other hospitals and medical schools. Eminent ability displayed by men in small hospitals and schools should lead to promotions, to positions of greater influence and honor elsewhere. One of our greatest needs is that medical schools should be able to call to a teaching position the man of the highest ability, wherever they may find him, and at the same time provide him with clinical material. Clinical material should go with the teaching position rather than that men should be appointed as teachers because they control clinical material. The relative progress made by surgery in the United States during the last thirty years is unsurpassed, if not unequaled, by any other country. What is needed is broader training and broader opportunities.

President's Address: The Physician Considered from an Economic Standpoint

DR. W. K. NEWCOMB, Champaign: The twelfth census shows the death-rate of physicians to be twenty per thousand and again notes the rate as higher than any other professional class. Nervous diseases again stand the highest as a cause of death, while the statistics of heart disease and tuberculosis remain the same. Thus for thirty years the United States census reports tell the same story of high death-rate, higher than any correlative profession and from causes that indicate the high tension under which physicians work and live.

During the last few years writers on economic subjects have had much to say of the waste of energy from unphysiologic hours and methods of work. This applies with unusual force to physicians and is unquestionably an important factor in developing the conditions above referred to, for the physician is the living embodiment of unsettled habits, and there seems to be no means of correcting this unfortunate condition.

Teachers of economics have long pointed out the loss in efficiency resulting from working under unfavorable conditions. This applies with striking force to the practitioner of medicine in addition to the continued tension alluded to above, is the broken rest, the loss of sleep, the necessity of undertaking some serious emergency or difficult operation at unusual hours, of rising from sleep unexpectedly, and perhaps thoroughly exhausted, to undertake some measure on which depends a human life. Even if the services of the physician be divested of all those sentimental features which the character of such

V. 58
1912

services imply, and they be regarded simply as a utility for which a certain price is demanded and paid, the same laws that apply to other utilities would suggest their preservation. In a case where so much depends on training, adaptability and experience of the individual, it would seem highly necessary to conserve his resources as much as possible, and the patrons of the medical man will admit that this should be done. That the laity should use every effort they can consistently to preserve the health and talents of their medical advisors does not seem to be asking too much.

Address in Medicine

DR. S. A. KNOPF, New York City, discussed some modern medico-sociologic conceptions of the alcohol, tuberculosis and venereal disease problems. His address will be published in THE JOURNAL.

Fulguration Treatment of Bladder Tumors

DR. HERMAN L. KRETSCHMER, Chicago, reported five cases of bladder tumors treated by fulguration, and said: The value of any new therapeutic measure is based on its results. The immediate results were absolutely satisfactory in the cases of papilloma; that is, the fulguration caused a cessation of the hemorrhages, and after a variable number of treatments the tumors completely disappeared. These results correspond with the results of others who have used this form of treatment. The remote results can best be determined only as time goes on. In the longest published case that I have been able to find, the patient was reported well nineteen months after the cessation of the treatment. This was reported by Dr. Keyes, junior, who also reported two patients well one year after operation.

If we bear in mind the simplicity of the treatment which can be carried out in an ambulatory way and the ease of treating small recurrences should they arise, this mode of treatment at least deserves consideration in the treatment of benign papillomas of the bladder.

The Vaccine Treatment of Some Unusual Infections

DR. E. C. ROSENOW, Chicago: Among other cases I report one of so-called idiopathic perforation of the nasal septum in a young woman. The difficulty referable to the nose consisted of occasional bloody discharges associated with what was considered a continuous cold in the head. The condition began three months ago, soon following a periosteal tooth abscess which perforated into the antrum, and which was a long time in healing. When I first saw the patient there was found an oval perforation of the cartilaginous portion of the septum one centimeter in diameter. The margin consisted of an angry looking bleeding ulcer. The adjacent mucous membrane was red. There was no reason to suspect nor any evidence on physical examination of a syphilitic infection, and a Wassermann test proved negative. There was found a moderate leukocytosis which disappeared promptly with the improvement. Three successive cultures showed the presence of *Staphylococcus pyogenes aureus* in almost pure form. A vaccine was prepared and from 80,000,000 to 300,000,000 injected every week or ten days. After two injections the margin looked less angry, the bleeding was markedly less, and the coryza had entirely disappeared for the first time in weeks. After six more injections the margin had entirely healed, and two cultures showed that the *Staphylococcus aureus* had entirely disappeared.

(To be continued)

MEDICAL ASSOCIATION OF GEORGIA

Sixty-Third Annual Session, held in Augusta, April 17-19, 1912

The President, DR. W. L. FITTS, Carrollton, in the Chair

A list of the officers elected was published in THE JOURNAL, April 27, p. 1291.

The Medical Society and Its Relation to Public Health

DR. THOMAS J. MCARTHUR, Cordele, Ga.: It is absolutely necessary that our medical societies take some active part in the public health propaganda. Local medical societies should assume a great deal of responsibility for teaching preventive medicine and creating a sentiment in favor of better sanitary conditions. An ideal plan would be for each local society to arrange for occasional public health meetings to which the public should be invited. Each society should have an educational committee whose duty should be to disseminate knowledge of this kind. If the society was teaching the community that the same precautions against malaria used by the United States authorities in the Panama Canal Zone would free the community from malaria, and that it was criminal negligence when the attending physician failed to give proper directions in regard to such matters when he had a patient sick with malaria, typhoid, or tuberculosis, and that it was a reproach on the attending physician and attendants when they permitted a case of typhoid, malaria or tuberculosis to cause other cases in the family or among the attendants, then the individual physician would be forced by popular sentiment to give definite, positive directions along prophylactic lines and urge that they be carried out.

What the Medical Profession of Georgia Has Done for Medicine

DR. T. R. WRIGHT, Augusta: To Dr. Milton Anthony belongs the credit of being one of the pioneers in lung surgery. In 1821, in Augusta, he dissected the fifth and sixth ribs and removed portions of lung tissues. He also first used the knee-chest position for the correction of uterine displacements. Richard D. Arnold, of Savannah, was one of the founders of the American Medical Association and took part in its organization in New York City in 1846. Dr. W. C. Daniel, of Savannah, first introduced Buck's extension apparatus, and in 1829 reported his cases of fracture of the thigh so treated. Robert Battey, of Rome, performed the first abdominal ovariotomy. References should be made to the work of I. P. Garvin of Waynesboro, Henry F. Campbell, Lewis B. Ford, Joseph A. Eve, Lewis A. Dugas, Crawford Williamson Long of Jefferson, Dr. Sims and many others.

The Eugenic Conservation of Man

DR. A. L. R. AVANT, Savannah: Our national government pays no attention at all to the betterment of mankind. It seems to be perfectly indifferent regarding the sanity and perfection of its citizens, and the propagation of the better of our kind; but when men are needed in our defense against an invading foe, none but those who are physically and mentally perfect are considered; the dwarfs and imbeciles and degenerates are not wanted. Intermarrying of the unfit and weak-minded has dwarfed the intellect of some rural communities. A very unfortunate feature of this class of our citizens is that they are very prolific and rear large families. We are permitting this class of our population to go on multiplying unhindered, continually adding more wards to our already overfilled hospitals, almshouses, asylums, and penitentiaries. It is time for us to take up this matter. There are two remedies, vasectomy and castration. The former operation does not destroy the sexual appetite or pleasure, but does prevent the propagation of the race. I believe this should be performed on all the unfit male members of the race who are quiet and harmless. Such persons are to a great degree irresponsible and should be cared for, but should cease to propagate their kind.

DISCUSSION

DR. RALSTON LATTIMORE, Savannah: If a proper check were put on the multiplication of criminals and degenerates, in four generations the prisons, insane asylums, almshouses and other places where these people are cared for would be only partly occupied. This association should take up this subject and urge the General Assembly to provide bills for the care of these patients. The surgical procedure should be left to a committee of three who should pass on the individual case, as to whether any operation is called for in the best interests of the community and of the patient.

DR. T. R. WRIGHT, Augusta: There is no more crying need in Georgia than a provision for the care of defective and feeble-minded children, and it is up to us to remedy the evil. There should be a place for these children where, if they are feeble-

minded, their minds may possibly be developed and if they are hopeless they may be cared for.

DR. HUGH H. YOUNG, Baltimore: Vasectomy is the only thing that need be done in these cases and this operation, properly performed, is perfectly safe. Some of the individuals on whom vasectomy was done in Indiana went over to Kentucky and had anastomosis done. Some law should be passed to prevent such anastomosing. No person should be operated on until passed on by a competent medical committee.

DR. V. H. BASSETT, Savannah: At present the matter is an educational one. The time has not yet come when this state should take measures to prevent the procreation of these degenerates. Adequate provision, however, should be made for the care of these persons.

DR. J. W. PALMER, Ailey: One point has not been brought out, the intermarriage of kin. A great many degenerates result from the intermarriage of relatives.

DR. J. L. HARRIS, Savannah: Vasectomy is a good operation to perform for the sterilization of the male. Laws should be enacted for the regulation not only of degenerates, but of tuberculous people and of those having incurable syphilis. Castration is a good remedy to apply to the insane, as often after the operation the violently insane become docile and useful subjects.

So-Called Neurasthenia—Some Factors Causative and Curative

DR. HANSELL CRENSHAW, Atlanta: Probably most cases of so-called neurasthenia are merely expressions on the part of the nervous system of the action of some irritant or strain, and it is our duty to search diligently for sources of irritation or strain before classifying such cases as purely functional neuroses. The careful clinician will study each neurasthenic patient literally from the crown of his head to the soles of his feet. There is another factor in the causation of neurasthenia besides the element of irritation or strain, and that is nervous instability, chiefly inherited. To my mind, the blood-pressure findings have been somewhat neglected in the literature. While we are told that there is a high blood-pressure type of neurasthenia, my experience leads me to suspect that the majority of cases of nervous exhaustion present abnormally low blood-pressure. It would seem that the blood-pressure curve is a very fair index to the progress of the patient, for the closer this curve approximates the normal mean of 130 mm. (systolic), the more nearly normal becomes the patient's general condition. When the pressure is high, the patient feels better; when the pressure is low, the patient feels worse. Obviously, the rational treatment of these cases is to remove any irritation or strain which may be responsible for the patient's loss of nervous vigor and equilibrium. My experience with drugs in the treatment of these cases, such as the old-fashioned antispasmodics, the more modern glycerophosphates and the very modern cacodylate of soda, has been discouragingly negative. On the other hand, the use of epinephrin and digitalis for regulation of blood-pressure has been encouraging. More effective than any drug, however, in these cases of constitutional or acquired nervous instability is the rest treatment.

DISCUSSION

DR. LEWIS M. GAINES, Atlanta: Dr. Crenshaw's views coincide with mine. There are three points I wish to emphasize: 1. A thorough physical examination, made in a systematic and orderly way. 2. Sexual affairs cause many cases of neurasthenia. This factor is most difficult to demonstrate, but much has been accomplished by the analysis of dreams which often represent a subconscious influence of an irritant which is not present when the patient is awake. 3. It is my belief that the use of epinephrin by the mouth has no effect on the blood-pressure and that it is so altered by the digestive juices that it has no effect whatever. If injected intravenously or subcutaneously it will give rise to an increased blood-pressure.

DR. E. BATES BLOCK, Atlanta: A great deal of the glamor of neurasthenia has been taken away by the introduction of the term "psychasthenia" with a train of mental symptoms which were formerly spoken of under the term "neurasthenia." These patients are more properly designated as psychasthenics. So far as neurasthenia is concerned, most cases can readily be demonstrated as due either to abdominal or sexual disorders. I have seen cases of duodenal ulcer, dilated stomach, floating kidney and ptosis supposed to be cases of neurasthenia, as well as cases of prostatitis, sexual excesses, and all sorts of sexual malpractices. The cure depends on the proper understanding of the causes. It is mainly by a study of the habits of the patient that one is enabled to remedy what is wrong.

(To be continued)

AMERICAN ASSOCIATION OF MEDICAL MILK COMMISSIONS

Sixth Annual Meeting, held in Louisville, April 30-May 1, 1912

The President, DR. HENRY ENOS TULEY, Louisville, presided

An address of welcome was delivered on behalf of the local profession by Dr. Edward Speidel, president of the Jefferson County Medical Society, which was responded to on behalf of the association by Dr. Henry L. Coit, Newark, N. J.

The following officers were elected: president, Dr. Ogden M. Edwards, Pittsburgh; secretary, Dr. Otto P. Geier, Cincinnati; treasurer, Dr. Samuel M. Hamill, Philadelphia; councilors, Dr. T. C. McCleave, Berkeley, and Dr. John R. Williams, Rochester.

President's Address: The Association and Milk Standards

DR. HENRY ENOS TULEY, Louisville: No one knows better than I what this association has developed into, and the enormous amount of work which has been accomplished by the two fathers present here to-day, Dr. Henry L. Coit, the founder of the first milk commission and Dr. Otto P. Geier, the founder of the American Association of Medical Milk Commissions. Both of these men have done a vast amount of work at a great deal of personal sacrifice. No new commission has ever been formed except after extensive correspondence with one or both of them. They are more responsible for the spread of the clean milk movement than any other persons.

No more typical example of true, altruistic service can be had than in the conscientious work of a member of a medical milk commission—unpaid, misunderstood, accused of graft and criticized for things done and undone. Yet the demand for certified milk is to-day greater than could ever have been the dream of Dr. Coit when he first wakened to the idea of the milk commission.

The term "certified milk" has a distinct meaning in the minds of the people. The Pure Food Department of the Kentucky Experiment Station was so certain of this popular conception that a suit was brought under a section of the pure food law against the misbranding of foods, in the case of a dairyman whose product was not certified to by a milk commission, but by his private and paid commission.

The publication of the final standards of working methods for all commissions should be commended. I urge that the time has come when the council of the association through the secretary with the manual as a guide should keep in touch with those commissions which are too lenient in their rules or too lax in the enforcement of them and help them by suggestion and if beyond help drop them from the roll of membership in the association. A single standard for all, lived up to by all, is the only assurance of the final success of the entire clean milk movement. The passage of state laws regulating and limiting the appointment of milk commissions to a county medical society should be encouraged, and the laws of New York, Kentucky and New Jersey can be taken as good working models.

The questionnaire sent out by the committee on standards asked for information on the following points: (1) the dairy hygiene as it relates to the collection, handling and transportation of the milk; (2) the chemical and bacteriologic conditions of the milk; (3) the veterinary inspections of the animals, their feeding, housing, hygiene and health; (4) the physical examination of employees handling the milk, their health and personal hygiene.

V. 58 1912

Because of the demand for certified milk this grade of milk is coming to be looked on more as a high-grade market milk than a clinical milk, which was the original conception of the term "certified milk." As a prophylactic agent the use of certified milk should be encouraged. The more general use of certified milk in Louisville by babies of the well-to-do, and through the Babies' Milk Fund Association by the babies of the poor, has been the means of cutting down mortality and morbidity from gastro-intestinal diseases in infancy throughout the entire year and especially during the summer. If the output is limited its sale should be confined to the use of babies and invalids and none sold for general consumption until these classes have been supplied. It should be looked on as a prescription milk and sold only on the recommendation of a physician.

A Volumetric Method for Determination of Fat in Milk

THOMAS B. STILLMAN, Hoboken, N. J.: A process to determine the percentage of fat in milk, that will be expeditious, correct, simple and free from the use of corrosive chemicals, has long been sought, and if this test can be performed by one not a chemist, then milk inspection before the milk is forwarded from the country to the cities would be of the greatest possible service in the securing of a better milk supply. M. Albert Bruno, chief of the Central Laboratory of the Service for the Suppression of Frauds, Department of Agriculture, France, proposes the use of a new instrument for the determination of fat in milk, calling it the bi-butyrometre of M. Muloteau, and the use of an alkaline reagent instead of acid. It is not necessary to describe this instrument, as manipulation with the Babcock bottles is easier, but the "Fouard reagent" used will prove of interest. This reagent is composed as follows:

	Gm. or c.c.
KHO	10
Alcohol, 95 per cent	50
Alcohol amylic	15
Ammonia, pure, at 22° B.	25

In place of amylic alcohol, as given in the Fouard reagent, I would substitute isobutyl alcohol, because the former has a very disagreeable, penetrating odor, whereas the latter has a pleasant, agreeable perfume, and its chemical properties, as required in this reagent, are similar to those of amylic alcohol.

Take 17.6 c.c. of the milk, transfer to a Babcock milk-testing bottle, add 10 c.c. of modified Fouard reagent, and place the bottle in a water bath and *gradually* heat the water to a point just below boiling, maintaining this temperature about fifteen minutes, shaking the bottle slightly at intervals. The color of the liquid becomes finally a deep red and the coagulated casein is dissolved. Add warm water carefully until the fat reaches nearly to the upper mark of the graduated stem of the bottle. The fat arises in the tube in a clear, transparent, yellow body, and the amount is read off in the per cent. of the milk fat. The space between 0 and 10 on the scale of the Babcock test bottle is divided into fifty divisions, each five of which represent 1 per cent. The Fouard reagent can be prepared in large amounts and, since it keeps well, can be available for use at any time.

Bacteriologic Contents of Milk Prepared and Kept in Vacuum Bottles

DR. R. HAYES DAVIS, Louisville: At the suggestion of the president of this association, I have made five series of counts with certified milk, all of which contained 10,000 or less bacteria per cubic centimeter, placed in vacuum bottles at temperatures of 120, 130, 140, 145, 167 and 212 F. The bottles were carefully cleansed, rinsed with warm water, increasing the temperature until boiling water could be placed in them without danger of cracking. They were then rinsed with the boiling water once, and then more boiling water was allowed to remain in them for about five minutes. The milk was now brought to the proper temperature and placed at once in the bottle. This proceeding was carried out at night and the plates were made after twelve hours had elapsed. In tabulating the results I have used the term 100,000 plus as a maximum, which is sufficiently high to demonstrate the absolute unfitness of such milk for infant-feeding, but many of the plates so described showed bacteria in such overwhelming numbers that counting was absolutely impossible without making further dilutions, which I did not deem necessary. Only three plates showed less than 100,000 bacteria. These were as follows: First milk at 130 F., 28,000; same at 140, 10,100; third milk at 145, 27,000. In all the other plates the count was 100,000 or more. In most of the plates the 212 milk showed considerably fewer colonies than the others, although all were distinctly above 100,000 bacteria. In the lower temperatures, such as 120 and 130, most of the plates were almost solid with bacteria.

These experiments would seem to demonstrate conclusively that the spores present in the milk are not destroyed by simply heating it to a high temperature, but will multiply very rapidly as soon as the temperature becomes sufficiently reduced for bacterial growth.

I then carried out several tests with market milk, and these gave practically the same results, except that the control milks before heating gave much higher bacterial counts than the certified milks, all reaching 100,000 or over.

Finally, I made an interesting experiment with the sterilization of vacuum bottles. The milks which were used in this test were all completely sterilized by subjecting them to live steam for twenty minutes in an Arnold sterilizer for three consecutive days, and were shown to be sterile by appropriate bacteriologic examination. The bottles were then treated by the boiling water method described above, which is the only practical one for mothers. The milk was then placed in the bottles at 100 F. and allowed to remain for twelve hours, at which time the plates were all found to contain the usual large number of bacteria. This showed that the method of sterilization of bottles within the reach of mothers would not be satisfactory at all.

DISCUSSION

DR. HENRY E. TULEY, Louisville: I was surprised to find how many mothers were using these bottles to keep milk warm, and, having seen two babies rendered ill by the use of such milk, I tried to discourage this method of warming milk.

DR. HARRIS MOAK, Brooklyn: In investigating complaints against certified milk in our city, we have found, in practically every instance, that the same principle had been violated as shown by Dr. Davis' experiments. We have found that it is customary, not in homes alone, to use hot boiled water in the modification of milk. I know of a certain hospital where, in four days, they lost nine babies out of a total population of thirty-six, and investigation showed that hot boiled water had been used in modifying the milk. At the present time our supervision of the production and handling of certified milk ends when it is deposited at the door of the consumer, but it appears to me that we should take a very great interest in what becomes of it afterwards.

DR. JOHN R. WILLIAMS, Rochester: My experience in my own home has taught me that the most safe and practical way to warm the milk when modifying it for infant-feeding is to keep boiling water in a vacuum bottle, and keep the milk cold by placing it in a pail of ice.

DR. MARTIN J. SYNOTT, Montclair, N. J.: Why did Dr. Davis select twelve hours as the incubation period in his test? It seems to me that with a shorter number of hours the results might have been more interesting, as in every-day use the milk would hardly be left in the bottle for such a long period. It is possible that milk placed in the bottle at bed-time might be sterile at, say 12 o'clock, and yet at the end of twelve hours show a large bacterial count.

DR. I. A. ABT, Chicago: I think we need more light before we can accept the statement of the gentleman from Brooklyn that the nine children he mentioned died from milk which contained bacteria. What time of the year did these deaths occur? What was the pathogenic microorganism that produced death? The mere fact that the milk contained 90,000 to 100,000 bacteria would not, to my mind, be the crucial point; they might be non-pathogenic. On the other hand, if it contained ten, or any small number of typhoid bacilli, or the bacilli of dysentery, it would be dangerous.

DR. CHAS. F. TENNEY, Toledo: The fact that milk heated to 212 degrees and placed in a sterilized vacuum bottle and kept for twelve hours will show a bacterial count of more than 100,000 per cubic centimeter is appalling. Last summer I was told by a chemist and bacteriologist for one of the milk concerns in Toledo that pasteurization at 160 F. would destroy the spores of typhoid bacilli, and I wondered what bacteria could resist 212 degrees of heat and produce such a growth as this in twelve hours.

DR. R. HAYES DAVIS: In reply to the question why a shorter period of incubation was not selected, I will say that I selected the period most likely to be employed by the mother. She could not realize the importance of time and would place the milk in the bottle at the time most convenient to her, whether early or late in the evening, and would continue to use from it until more was prepared the next morning, and I regarded twelve hours as a fair average. The results might be different in a period of six or eight hours, and it will be interesting to work that out at another time. While bacteria themselves are easily destroyed by heat, spores are very resistant, and if the milk is subjected to only one heating for a short time various bacteria will take the form of spores and will not be destroyed, and as soon as the temperature becomes favorable they will multiply very rapidly.

Further Observations on the Germicidal Action of Milk

MR. MARTIN BECK, Louisville: The "germicidal" action of milk varies in different animals and at different times. At most the action is variable and feeble. It cannot take the place of cleanliness and ice, but may be taken advantage of in good dairy methods. A decrease in the number of colonies developing in agar was shown, continuing, in some samples as far as the ninth day. In every case an increase in the number of bacteria growing at 20 degrees C. occurred several days previous to the increase of the 37 C. cultures. In samples kept for from three to four weks, the number of 20 C. organisms greatly exceeds those developing at 37 C., the increase being due, apparently, to an organism which does not grow at 37 C. This is suggested as the cause of some cases of ice-cream poisoning.

DISCUSSION

DR. LEON K. BALDAUF, Louisville: Recent experiments tend to show that the decrease in the number of organisms is not due to a germicidal action of milk, but to the agglutinins present in it; that if the milk is heated to 56 C. for half an hour, this restraining action is not affected, but if heated to 70 or 75 C. it is more or less completely destroyed.

DR. HARRIS MOAK, Brooklyn: I have often wondered why this germicidal action of milk, if it exists, should not take place in the cow's udder, and give us milk practically free from bacteria.

DR. CHARLES E. NORTH, New York: We know that there are certain species of bacteria which form gelatinous substances which make it possible for them to stick together in clumps, and I think this, among other things, must be considered in making bacterial counts of milk, especially that which is studied at a cold temperature. A higher count might be obtained by shaking up the milk thoroughly, thus breaking up the clumps.

DR. MAZYCK P. RAVENEL: Experiments started in my laboratory have pretty thoroughly convinced me that there is a real germicidal action of milk. It could not take place in the cow's udder because the udder is a gland which secretes during the process of milking, and therefore, the milk does not have an opportunity to act on the bacteria which are normally in the acini of the gland.

MR. MARTIN BECK, Louisville: Regarding the bactericidal action of milk in the cow's udder, it has been demonstrated that absolutely sterile milk can be obtained from a healthy cow under proper precautions. In regard to the reduction being due to the clumping of the bacteria, it has been shown that by shaking the milk vigorously as many as twenty-five times, an enormous increase in the count was obtained. This was done in all of our experiments in order to break up all clumps that could possibly have formed.

Report on the Tuberculin Testing of Dairy Herds

DR. CHARLES E. NORTH, New York: Summarizing the twenty-seven complete reports of commissions, it appears that during the past year there have been 7,974 dairy cows tested, of which 319 reacted. The committee is unable to make a report regarding the slaughtering of these animals or other method of disposal, or concerning the nature of the tuberculous lesions in these animals, because the information is too meager. A comparison of these results with those obtained from a similar inquiry conducted by a special committee of the Certified Milk Producers' Association, last year, shows that in the inquiry of last year the percentage of reactors was about 3 per cent., while in the inquiry of this year the percentage of reactors is about 4 per cent.

The committee made a number of recommendations concerning membership in medical milk commissions and the certification of dairy farms. The recommendations were adopted.

(To be continued)

INTERNATIONAL CONGRESS ON TUBERCULOSIS

Held in Rome, April 14-20, 1912

(Concluded from page 1627)

Artificial Pneumothorax

CARLO FORLANINI, of Pavia, urgently recommended artificial pneumothorax. Many patients with severe involvement of one lung who could not be helped in any other way are cured by this method. The injection of nitrogen into the pleural cavity is frequently followed by a prompt fall in temperature, euphoria and an improvement in nutrition. The contra-indications are emphysema, splanchnoptosis, adhesions of the pleura and extensive involvement of both lungs. The technic is free from danger.

L. BRAUER, of Eppendorf, recommended the procedure but only by the open method, which in his opinion was the only way to avoid serious complications; the puncture method could be used after the lung had been collapsed to renew the gas in the pleural cavity. He recommended a simple manometer to measure the pressure by which the gas was introduced. An attempt to stretch pleural adhesions is useless. Air embolism is the most dangerous complication and may be fatal. Hemiplegia is a complication that may persist.

F. DUMAREST, of Hauteville, speaks in high terms of the method, but mentions serious complications, among others, septic empyema and acute involvement of the other lung. He did not speak of air embolism or hemiplegia.

A. ZUBIANI, director of the Pineta di Sortenna Sanatorium, reported on forty-three cases of artificial pneumothorax, seventeen of which had been at first treated by others and had later come under his care. Twenty-six were cases in which he had begun and ended the treatment. In all cases the technic of Forlanini was followed, the nitrogen gas filtered and injected under measured pressure. The results in the last series of cases are fully recorded. In fourteen cases it was good and the complications in the others were not severe. In no case did he have embolism or hemiplegia. In several cases of spontaneous pneumothorax the gas was injected to maintain the lung collapse, with good results. Adhesions of the pleura and involvement of the lungs are contra-indications. In his opinion, the operation should only be done in hospitals, or better, sanatoriums in which the hygienic after-treatment can be carefully directed.

SILLIG, of Leysin, reported an eclamptic attack which he regarded as unquestionably due not to gas embolism but to a pleural reflex. A pleuritic exudate was withdrawn and gas injected; when 600 c.c. were introduced the patient suddenly became pale, had severe pain in the chest and lost power on his right side, with complete amaurosis. In a few minutes these symptoms disappeared. This was his fourth injection. The third, in which 900 c.c. of gas were introduced, was not followed by symptoms. The patient ultimately recovered. In another case death occurred suddenly on a second attempt to collapse the lung.

V. 58
1912

Light

N. ZUNTZ discussed solar radiation in the treatment of tuberculosis. Special studies show that the effect of intense light on those parts of the body usually protected by clothing is to cause a heightened ventilation of the lungs and an accompanying increased depth of respiration. This difference was especially noticed in youthful persons. In one individual the respiratory rate fell from 9.5 to 4.2 per minute with an augmentation of the volume from 746 to 1,520. The respiratory volume and oxygen consumption were practically the same. It would be rash to draw conclusions from these data as to the effect of light in tuberculosis. Experiments should be conducted in a systematic way on those suffering from this infection.

F.MORIN, of Leysin, maintained that the solar rays were strongly bactericidal. Under certain conditions light rays penetrate deeply into the tissues. The dilatation of the superficial vessels causes a decongestion of the deeper structures, stimulates nutritive changes and tones the nervous system augmenting the production of hemoglobin and the cellular constituents of the blood. All these are of value in the treatment of tuberculosis, but as prophylactic measures they have been better recognized. It is especially important that children should have prolonged air- and sun-baths. The sun-rays are of especial value in the treatment of latent, surgical and visceral tuberculosis, but some care must be exercised in its use in pulmonary cases, and its use in this class needs further study, but many patients are benefited by its employment.

H. VON SCHROETTER, of Vienna, and SOPHUS BANG, of Denmark, further elucidated the subject, the latter dealing with the bactericidal action of sun-light. He points out the importance of biologic measurements in contradistinction to physical studies. Certain narrow portions of the spectrum may be bactericidal in high degree, others less or not at all.

SCHROETTER advances no definite conclusion on the relation of light to pulmonary tuberculosis, but is of the opinion that it is of distinct value in the so-called surgical tuberculosis. Both communications go too much into detail to admit of satisfactory presentation here. The work of Schroetter and Bang was the leading research contribution to the congress. The communication of Schroetter is a monograph of 109 pages, dealing first with the physical and chemical problems, and the measurement and duration of sunshine with its intensity, and a description of the photochemistry of light. He then takes up the physiology of light and heliotherapy in relation to tuberculosis. Then follows a lengthy discussion of the treatment of surgical and pulmonary tuberculosis.

ROLLIER presented the results in 650 cases treated at Leysin. The results were strikingly favorable, but it is to be noted that the patients had the benefit of sanatorium care, and the reporter does not attribute all of the good results to the irradiation but he regards it as an important factor.

Diagnosis

L. GIUFFRÈ, Palermo, and F. KRAUS, Berlin, discussed the early diagnosis, advancing nothing new, but approaching the subject from the biologic standpoint and giving a full summary of present methods.

HUTINEL, of Paris, presented a carefully prepared summary of the diagnostic methods in young children. He stated that the disease was far more common in infancy than was generally believed. He emphasized the importance of study of the surroundings of infancy with especial reference to exposure. The infection in children is usually fixed in certain organs and is marked by a profound effect on nutrition. Laboratory methods are of special importance in the diagnosis of the disease in infancy. The cutaneous and intradermal methods are preferable to either the ocular or injection method in using tuberculin.

FLICK, of Philadelphia, recognizes the impossibility of standardizing normal and abnormal sounds, yet it is desirable to have some international agreement as to sounds and the signs used to designate them. It would seem to be expedient at the present time to adopt an international history-sheet on which could be recorded a complete history of the case, a full record of all the symptoms of the patient, a diagrammatic charting of the diagnosis and if possible the prognosis, and a record on the side of the diagram of all the normal and abnormal auscultation sounds and percussion notes, of all normal and abnormal vibration sounds, of all alterations in the form of the chest, and of all adventitious sounds which may appear to be of importance to the examiner, expressed in such language as would be clear to others. The diagnosis should always contain a definite opinion on healthy tissue as well as on diseased tissue.

Milk

L. PANISSET, of Paris, believes that 10 per cent. of all samples of commercial milk is contaminated with virulent tubercle bacilli. The bacillus comes from diseased mammary glands. If they are sound, the milk is probably contaminated from outside sources. In milk and its products, cheese, butter, etc., the bacillus retains its virulence for a long time. This source of infection is to be met by eliminating the tuberculous cow and pasteurizing the milk.

NATHAN STRAUS, of New York, pointed out the importance of prevention and emphasized the necessity of pasteurizing milk. His experience in providing a pure milk for babies in New York demonstrated that raw milk was a considerable factor in spreading infection. He said: "It is from twenty-one years of practical experience that I speak when I commend all efforts to produce clean milk from healthy cows, but recognize that there is really no such thing as raw milk that can be depended on to be clean and pure and free from disease day after day, even though it be produced with such elaborate precautions that it cost three times as much as ordinary market milk."

Modes of Infection

F. WELEMINSKY, of Prague, described a method of infection sufficiently different from the commonly accepted notions to be worthy of extended comment. It is significant that A. Calmette, of Lille, presented identically the same views. Tuberculous infection is said to take place in 90 per cent. of children before the fifteenth year. As tuberculosis in infancy usually involves the lymph-nodes and pulmonary tuberculosis is rare, it is almost certain that the infection gains entrance through the lymphatics. A natural corollary of this is that tuberculosis in adults is often not primary but only a continuation of infantile tuberculosis of the lymphatic glands. This accounts for the fact that the lymph-nodes in consumptives often remain sound and that patients suffering with mitral stenosis rarely have tuberculosis, though with insufficiency of the pulmonary valve they easily acquire the disease. Early involvement of the bronchial glands is easily explained by the direct connection with the lymphatic system.

HILLENBERG, of Zeitz, expressed opposite views, stating that consumption in the adult is in the great majority of instances independent of tuberculous infection in infancy.

Exploitation of Proprietaries

The following remedies are cited as an example of the laxity of the Committee of Arrangements in permitting the exploitation of proprietary remedies. Such literature was freely distributed and was the subject of severe criticism.

Sophie Fuchs-Wolfring, a co-worker of Carl Spengler of Davos, referred to the enormous cost in Germany of sanatoriums for the treatment of tuberculosis. The results she maintained, were problematical, but all this could be changed by the "I. K." treatment of Spengler. She urged the employment of this remedy in early cases and in dispensaries.

Radium therapy was exploited by S. Bernheim, Paris, recommending a preparation called "Dioradin" which can be obtained anywhere in the world by application to the special agencies which have been established for the sale of this remedy. As to what this substance is we are left completely in the dark except for the statement that it is a combination of "mentholated radio-active iodin," whatever that may be.

"Phymalose," a new preparation by Doyen of Paris, belongs to the above group. It is said to be composed of "Mycolysin" and tuberculin. It is asserted that this substance is superior to all others and destroys at once the tubercle bacillus and the associated microbes.

"Emoantitossina," a substance invented by F. Figari of Genoa is declared to be composed of antituberculous substance combined with alcohol water and aromatic substances. It is to be taken by the mouth.

Conclusion

While but little of definite value that is new was developed by the congress, it was interesting to note the decline of former views with regard to the influence of climate and the growing sentiment, not only in favor of sanatorium treatment, but the further fact that the results by other methods are unsatisfactory.

The hygienic and dietetic treatment of tuberculosis seems to be accepted in Europe as fundamental, and that whatever changes are made will be with the present methods of treatment as the basis. The use of tuberculin as a diagnostic and therapeutic agent is no longer questioned by those in a position to speak authoritatively. Vaccines and serums are regarded with favor, but are still in the experimental stage.

A dominant note of the proceedings was that instead of looking for a specific remedy for tuberculosis, the protean character of the disease was recognized, and instead of energies being directed to the discovery of a single remedy or method, intensive study is being focused on the several methods which must be devised to meet varying conditions.

If nothing new of practical value was developed, the work of the congress was none the less notable. Several new lines of attack were developed, and while practical results have not been obtained the indications are that some of them will prove successful. Be this as it may, the most encouraging feature of the congress is shown by the activity which must result in vastly improved methods of treatment, as has hitherto been done in other diseases, which seemed as formidable as tuberculosis now does.

The next congress will be held five years hence in London. In the meantime it is hoped that many of the errors of the last congress will be corrected. At least the English-speaking delegates present expressed themselves very freely in favor of a censored program, in which the papers should be limited and only papers or reports of distinct merit submitted.

This method is suggested in the interest of the delegates who attend, and also for the more important reason that the papers presented to an international congress are regarded as more or less authoritative by laymen; hence exceeding care should be taken that no papers shall be presented that are simply for the purpose of advertising the author, or exploiting doubtful and even quackish methods as was the case with the present congress.

OHIO STATE MEDICAL ASSOCIATION

Held at Dayton, Ohio, May 7-9, 1912

(Concluded from Page 1631)

The Anatomic and Physiologic Effects of Iodin on the Thyroid of Exophthalmic Goiter

DR. DAVID MARINE, Cleveland: The clinical evidence, especially that of surgical therapy, tends to support the thyroid hypothesis. Anatomically, the changes found in the thyroid are neither constant nor specific, and the extensive studies based on the iodin content of such thyroids have given negative results. The same is true of the feeding of desiccated thyroid made from exophthalmic goiter thyroids and the administration of extracts of such thyroids. In cases of cretinism or myxedema, such feeding gives the same results that other forms of desiccated thyroid do if of like iodin content; and the feeding of large amounts of exophthalmic goiter thyroid to patients with complete exophthalmic goiter syndromes induces the same effects that similar amounts of desiccated thyroids from other sources produce, if the latter have a like iodin content. Neither specific nor constant anatomic changes have been demonstrated; the storage of iodin in the gland and the involution of active hyperplasia by the use of iodin is, so far as at present known, identical with those iodin relations common to other clinical associations. The thyroid of exophthalmic goiter has no different pharmacologic action on animals, or therapeutic action on myxedema or toxic action on patients with exophthalmic goiter than thyroid preparations of other clinical associations with like iodin contents.

The Clinical Evidences of Relation Between Exophthalmic Goiter and Altered Function of the Thyroid

DR. C. F. HOOVER, Cleveland: If "hyperthyroidism" or "dysthyroidism" or "thyrotoxicosis" are proved, then, of course, amputation of a part of the thyroid would be a rational procedure; but if the thyroid secretion is not the cause of the group of symptoms called Graves' disease or exophthalmic goiter, the amputation may still be of service on purely empirical grounds. An investigation of what is actually known in regard to the amputation theory will offer decided evidence against it. While some patients will improve after having a part of the goiter removed, it is not because the procedure lessens their hyperthyroidism, dysthyroidism or thyrotoxicosis. While one is justified in saying there is a relation between goiter and hypothyroidism, there is no justification in claiming a relation between the frequency of goiter and hyperthyroidism. All the known evidence shows that when the thyroid varies from the normal type, the change is toward hypothyroidism rather than hyperthyroidism. If the hyperthyroid patient develops an atrophy of the thyroid instead of the colloid state, then there appear all the symptoms of myxedema or hypothyroidism, and the symptoms of Graves' disease or hyperthyroidism remain unchanged.

Vaccine Therapy of Tuberculous Adenitis

DR. W. G. GARDINER, JR., Toledo: It was impossible to regulate the routine of the daily life of these patients. Many of them lived in conditions far from ideal, and therefore any improvement may be attributed safely to the vaccines. To get the best results, it is necessary to treat the patients generally, as in other tuberculous affections. The bacillary emulsion gives very good results in this disease. One should be very conservative in increasing the dose, as small doses repeated often give better results than larger doses. Since good results have been obtained with the tuberculin treatment and also with the *x*-ray treatment, it would seem that a combination of the two, used guardedly, might give even better results.

MISSISSIPPI STATE MEDICAL ASSOCIATION

Fortieth Annual Meeting, held at Jackson, April 9-11, 1912

The President, DR. D. J. WILLIAMS, Gulfport, in the Chair

Officers Elected

The list of officers elected was published in THE JOURNAL, April 27, p. 1292.

Hydrothorax in Its Relation to Cardiorenal Lesions

DR. FRANK JONES, Memphis, Tenn: Hydrothorax is often an acute condition instead of a part of a general dropsy. Acute nephritis is often ushered in by an attack of acute edema of the lungs followed by acute fulminating hydrothorax. In all probability the attack of edema of the lung is due to the same toxic agencies which produced the renal changes. In these cases passive congestion, venous stasis, etc., have nothing to do with the production of the edema. The large black lung is analogous to the large red kidney. When dyspnea is marked, either in cardiac or renal lesions, examine the patient's chest critically for hydrothorax. Hydrothorax, massive in nature, is often latent. Saline cathartics and digitalis, when hydrothorax is present to any appreciable degree, are dangerous. They invite edema of the lungs and paralysis of the heart.

Gastric Ulcer

DR. R. M. BOYD, Aberdeen: I believe that gastric ulcer is due to mechanical irritation alone. The treatment of the ulcer is the province of the physician, the complications alone belong to the surgeon. I would lay special stress on the diet.

V. 58
1912

DISCUSSION

DR. P. R. BROWN, West Point: There is no field in medicine in which prophylaxis is more important than in the treatment of gastric ulcer. If it is recognized early the tendency is toward healing. Unless gastric ulcers are diagnosed early and sufficiently treated, we have an invalid on our hands. Many cases do not come to the attention of the physician until the patient is found in a very bad condition from hemorrhage. The treatment should be very simple. Put the patient to bed and withhold all food and drink for five days. A great many cases occur from the constant leakage of gastric juice.

DR. JOHN DARRINGTON, Yazoo City: Those men who are doing surgical work are apt to think too often that certain diseases of man are subject to surgical treatment. We must not be extremists. But I believe that gastric ulcer is strictly a surgical disease. Those suffering from chronic gastric ulcer certainly should be advised to have the operation performed because of the marvelous success attained by it.

DR. J. G. GAITHER, Oxford: The churning action of the stomach is more important than the digestive function. I believe that the whole proposition centers in the proper passage of the chyme from the stomach into the intestines.

Some Interesting Cases of Uncinariasis

DR. H. BOSWELL, Laurel: Four cases have come under my observation in which the predominant symptoms were those of malaria, gastric ulcer, epilepsy and spinal sclerosis—all yielding to thymol.

DISCUSSION

DR. J. E. JOHNSON, Hudsonville: I have had several cases similar to those mentioned. I gave thymol and the patients recovered.

DR. G. S. BRYAN, Amory: About two years ago I saw a young lady who had had a slight convulsion two or three years before, about the menstruation period. She paid little attention to it thinking it was the menstrual epoch. Later she had a similar attack but more severe. Two months later she had another attack still more severe. Then the attacks became more frequent. The family history was good. The patient was red-cheeked, well developed and quick-witted. She was good in her studies. I had no specimen of her feces and I could not get her blood examined. I had no idea what was the matter with her. I told her father to take her home and I would look into it. Later, I suggested treatment for hookworm. She was given a dose of thymol and has never since had another attack.

DR. H. BOSWELL, Laurel: I had a case very similar to Dr. Bryan's. The girl was in excellent health. I suggested that she be examined for hookworm, which was done and the infection found to be present. One dose of thymol cured her. The stomach cases are very prevalent, especially patients who have indigestion. It is true that thymol sometimes makes patients very sick, but in doing the work over the state I have come to the conclusion that magnesium sulphate is the cause of much of the sickness attributed to thymol. I saw a man given a number of doses of thymol in alcoholic solution in 60-grain doses and followed with castor oil; he is now well. I have tried three different methods and I prefer the capsule, mixing it with from 25 to 50 per cent. sugar of milk. I do not like the tablets as they do not dissolve in the intestines.

Tuberculosis Among the Insane

DR. J. C. HERRINGTON, Asylum: Most of the tuberculous patients at the State Insane Hospital are infected before coming to the institution. Those who have been long in confinement are infrequently attacked. The degree of the confinement does not have so much to do with the incidence of the disease as one would suppose. All patients are cared for in camps outside the buildings. It is difficult to make early diagnosis in insane people. Treatment presents some difficulties. Cooperation by the patient is sometimes hard to secure. This is in some degree offset by the fact that the physician has absolute control over the patient's manner of living. The prevalence of tuberculosis among those mentally deranged in former times was evidently due to the bad hygiene of the place of confinement. Open air, a nutritious diet and the least medication with which the patient can get along give best results. The death-rate in the camps since July, 1910, has been: White males, 26 per cent.; white females, 23 per cent.; colored males, 26 per cent.; colored females, 59 per cent. The preponderance of mortality in colored females has not been explained to my satisfaction. In the camps they are under identically the same conditions as the other patients. Overfeeding and overmedication are real dangers.

DR. S. MYERS, Vicksburg: I differ with Dr. Herrington on one point. The feeding of raw eggs will disgust the patient. A coddled egg is better, and so is the slightly warm egg, and has a greater food value.

Management of Complicated Compound Fractures

W. W. CRAWFORD, Hattiesburg: There is scarcely any limb in a hopeless condition if the blood-supply has been left intact. With very rare exceptions, the question of immediate amputation need not concern us. If the patient is admitted in a state of shock, do not amputate immediately, no matter how unpromising the limb, unless it can be done by one or two simple strokes of scalpel or scissors. Do not do an immediate amputation of any limb until sure that the blood-supply has been entirely destroyed. Do not forget that extensive destruction to bone and muscle will be compensated by Nature if given an opportunity. Do not despair of saving a limb because there are a few points of necrosis. Curet and give free drainage; Nature will do the rest.

DISCUSSION

DR. E. J. JOHNSON, Yazoo City: I agree with Dr. Crawford with reference to conservative treatment and great effort to save the limbs. I have amputated limbs which if I had taken more time I might have saved. Since I have found that we can treat an open wound with good effect, I think we should try by all means to save the limb. One of my patients was an Italian who was shot in the leg with a 38 pistol ball and sustained an extensive fracture. I made a free incision and rendered the field perfectly clean and brought together all the pieces of bone and bunched the fragments with catgut. I made the leg stationary and did not put it in splints. I dismissed the patient with only ½ inch of shortness in his leg.

The Making of an Agreeable Prescription

DR. S. MYERS, Vicksburg: The usual horrible mess which the average physician concocts is the real basis of the use of proprietary medicines. I would lay down as a rule: A prescription ought to look good, taste good and smell good. The value of glycerin as a sweetening agent for liquids is great and so is the use of citric acid, 2 grains to the ounce, for improving the taste of prescriptions of the various salts.

DR. A. M. HARALSON, Newton: The physicians are to blame for prescribing the proprietary medicines by their ordinary names. We should prescribe drugs by the Pharmacopeial or National Formulary name. We should make our prescriptions as agreeable as possible, especially for young patients. It does not make much difference with the older patients.

Senile Gangrene: Selection of Amputation Site

DR. W. R. MCKINLEY, Columbus: The choice of the site for amputation is the great problem. Shall it be high or low? I have adopted the plan of following up the blood-vessels, from the lowest level in healthy tissue, until a point is reached above the circulatory obstruction or insufficiency. My series of six cases has shown satisfactory results. By operating at the lowest safe point, I avoid the added shock of amputation at the higher level and conserve tissue.

Importance of Early Surgical Interference in Mammary Cancer

DR. JULIUS CRISLER, Jackson: Every tumor of the breast should be treated as malignant and removed. In the beginning, when the tumor is small, it should be enucleated—and this can frequently be done under local anesthesia—and submitted to a microscopist. If the findings show malignancy, a complete amputation should be done.

DISCUSSION

DR. J. S. ULLMAN, Natchez, Miss.: Early operation is the only means of preventing recurrence of cancer.

DR. H. P. COLE, Mobile, Ala.: Almost all cancers occur in women beyond the lactation period. During the lactation period we should not operate unless necessary for the reason that the woman has need of the breast.

DR. E. M. HOLDER, Memphis, Tenn.: Statistics show that 80 or 90 per cent. of breast tumors are malignant or become so. I have often thought that lack of care in confinement is the cause, also lack of care of the nipple. We can trace back many of these cases to early life. In Austria there is an educational campaign being conducted in regard to these cases. We should have the same thing in this country. Here I have known a woman to go from five to ten years afflicted this way without saying anything about it, "because she is embarrassed," and when such cases come to the physician or surgeon they are frequently beyond control. These cases of tumor of the breast should be cared for at once. Take the tumor out and have it examined by a competent man. There is a tendency among physicians to ask if there have been any cancers in the family, and if the woman says that there have not, the physician frequently tells her that it is only a little cyst. Do not do that. Cancer is not hereditary.

The Cause and Cure of Race Degeneracy

DR. J. H. FOX, Asylum: Alcoholism and venereal diseases are the chief causes of degeneracy, and I plead for education looking to the prevention of drunkards and syphilitics. Education must precede legislation.

DISCUSSION

DR. B. L. CULLEY, Jackson, Miss.: Possibly I shall not see the day when we will get the legislation needed on these matters, but I commend an effort in the younger men in that direction. We are fighting tuberculosis and hookworm, but the diseases under discussion we are ashamed to mention. Fathers and mothers need to know these things. If we can eradicate these diseases we shall have taken a long step toward the eradication of other diseases. I believe it can be done without compromising the social feelings of anyone.

DR. G. S. BRYAN, Amory, Miss.: If we want legislation it is up to us to get it. Education of the public is necessary. We also need education and reformation among the physicians in their handling of these matters. We should be consistent, and first educate and reform ourselves and then get the needed legislation.

DR. J. D. GILLEYLEN, Jackson, Miss.: We shall get more from education than from legislation. I have never been able to believe that we can legislate sin from our people. We must educate the child. It can be done at school and at home. I want to lay special stress on the educational route to get results.

DR. C. KENDRICK, Kendrick: From a study of statistics of the great increase of such degenerates it looks as if the human race may soon be overburdened with the care of weaklings. I have nothing against the education of the public in regard to sex matters and how to avoid the pitfalls of sexual immorality, but all the knowledge you can put into a man's brain will not control the sexual instinct. He will brave any and all dangers to satisfy his lust. I do not think we can legislate in such a way as to prevent illicit intercourse. But we can deny marriage to those who are sexually diseased and that will help a great deal. We can require a certificate of good health before marriage is allowed. Any sexual disease can be made the subject of a report to the state board of health. A law requiring a health certificate from the health authorities is as far as we can go before attempting further legislation.

DR. E. F. HOWARD, Vicksburg, Miss.: As to legislation, a few years ago I had a paper in which I advocated the prevention of all venereal diseases by law. When they got through discussing it one could not see me because of the dust. I witnessed a little experience in the police court of Vicksburg. A physician was being tried for concealing a case of diphtheria. Another physician went on the stand and made the statement that the law requiring reports was a farce. He said: "Gonorrhea comes under the head of diseases required to be reported by this law. If I should report all the cases of gonorrhea I have treated it would be interesting reading." The law was immediately modified so as to exclude gonorrhea. It is up to the physicians to educate. It is easier to educate the legislature than all the people as to the advisibility of reporting gonorrhea. The individual man does not want the family secrets on the public record. The education of the young is the whole story. It has been advocated by men all over the country and much good has been done. But how far are we to go in educating them? If one does not say enough one will excite their minds and curiosity and they will get more and dangerous information. What can I say to my boy when he gets old enough? One cannot have a blanket law in this respect; that is the stumbling block.

DR. R. S. CURRY, Jackson, Miss.: Education of the people is the keynote. Education in regard to hookworm has had marvelous success. A few years ago the people did not know about the mosquito but now they do, through education. We must educate the children; we must teach them that alcohol is a drug and not a beverage. These lessons must be taught in the home and in the school. The teacher should have a scientific knowledge of alcohol. It should be taught by a physician who knows his subject. Let us give this instruction because we can do it best. We can get legislation if we need it. There is not a physician in this state who has no political influence, if he is a good man. We ought to educate the people. This is one of the most vital subjects before the American people to-day.

DR. B. L. CULLEY, Jackson, Miss.: Education must come first and then legislation.

Enuresis

DR. S. G. WILSON, New Orleans, La.: This condition is a psychosis and treatment by bitter tonics, the faradic current and, in boys, by prostatic massage is indicated. The condition occurs chiefly between the ages of 3 and 5 years, and twice as often in boys as in girls. Many cases, however, are seen after 5 years of age, up to 13 or 14, and the older the patient the harder it is to effect a cure.

Some Sanitary Measures Which Should Be Required of Public-Service Corporations

DR. F. M. SHEPPARD, Richton: Telephone companies should be forced to keep toll-stations clean and disinfect the mouthpieces of the instruments therein. Express companies should see to it that they do not handle packages that may have been infected in such a manner as to contaminate other packages. Passenger cars and depots should be screened and toilets should be so constructed as to afford the highest degree of sanitation. Incinerators should be used at depots in towns where there is no sewerage.

The Use and Abuse of The Uterine Curet

DR. A. G. PAYNE, Greenville: We are too prone to use this handy little instrument, which, when improperly used, is potent for much harm. Its indiscriminate use has greatly increased the death-rate in the infection following miscarriage and labor at term. Where we have uterine hemorrhage of unknown cause it is permissible to use the curet to obtain a specimen. It is used to advantage in inoperable uterine fibroids, preparatory to the application of the cautery. It may be used in chronic abortion or for emptying the uterus when the infection is limited to the uterine cavity. Its use is contra-indicated when the uterine adnexa or peritoneum are involved or in cases of streptococcic infection. The danger of perforation should be remembered when operating after an abortion.

DISCUSSION

DR. JULIUS CRISLER, Jackson, Miss.: I believe that the doctor who picks up a curet had better pick up a scalpel. The use of the curet subjects the patient not only to immediate danger but to after and chronic effects. And when the patient comes to the operating-table later, it is usually because of the use of the curet.

DR. G. S. BRYAN, Amory, Miss.: The uterus can be more effectively emptied by the use of the finger than the use of the curet.

V. 58
1912

Medical Education and State Boards of Registration

COMING EXAMINATIONS

DELAWARE: State Society and Homeopathic Examining Boards, Dover and Wilmington, June 18-20. Secretary of Medical Council, Dr. Henry W. Briggs, Wilmington.

ILLINOIS: State Armory, Springfield, June 13-15. Sec., Dr. James A. Egan.

IOWA: Capitol Building, Des Moines, June 13-15. Sec., Dr. Guilford H. Sumner, State House, Des Moines.

KENTUCKY: The Armory, Louisville, June 3-5. Sec., Dr. J. N. McCormack, Bowling Green.

MARYLAND: Regular, 1211 Cathedral Street, Baltimore, June 18. Sec., Dr. J. Mel. Scott, 129 West Washington Street, Hagerstown; Homeopathic, St. Luke's Hospital, Baltimore, June 13-14. Sec., Dr. O. N. Duvall, 1326 North Mount Street, Baltimore.

MICHIGAN: Ann Arbor, June 11-13. Sec., Dr. B. D. Harison, 504 Washington Arcade, Detroit.

MINNESOTA: State University, Minneapolis, June 4. Sec., Dr. Thomas S. McDavitt, Lowry Building, St. Paul.

MISSOURI: Gymnasium of the St. Louis University, St. Louis, June 24-26. Sec., Dr. Frank B. Hiller, State House, Jefferson City.

NEW JERSEY: State Capitol, Trenton, June 18. Sec., Dr. H. G. Norton.

NEW YORK: June 25-28. Chief of Examinations Division, Mr. Harlan H. Horner, Department of Education, Albany.

NORTH CAROLINA: Hendersonville, June 11. Sec., Dr. Benjamin K. Hays, Oxford.

OHIO: Columbus, June 18-21. Sec., Dr. George H. Matson, State House, Columbus.

PENNSYLVANIA: Philadelphia, Pittsburgh and Harrisburg, June 24-27. Secretary of Bureau of Medical Education and Licensure, Nathan C. Schaeffer, Harrisburg.

SOUTH CAROLINA: Columbia, June 11. Sec., Dr. A. Earle Boozer, 1506 Hampton Street.

TEXAS: Austin, June 27-29. Sec., Dr. J. D. Mitchell, Fort Worth.

VIRGINIA: Richmond, June 18-21. Sec., Dr. R. S. Martin, Stuart.

WYOMING: State Capitol, Senate Room, Cheyenne, June 12-14. Sec., Dr. A. B. Tonkin, Riverton.

Maine March Report

Dr. Frank W. Searle, secretary of the Maine Board of Registration of Medicine, reports the written examination held at Portland, March 12-13, 1912. The number of subjects examined in was 10; total number of questions asked, 90; percentage required to pass, 75. The total number of candidates examined was 18, of whom 10 passed and 8 failed. Two candidates were licensed through reciprocity. The following colleges were represented:

PASSED

College	Year Grad.	Per Cent.
Baltimore Medical College	(1911)	81
Baltimore University	(1902)	80
Tufts College Medical School	(1908) 81; (1909)	83
College of Physicians and Surgeons, Boston	(1911)	77
Columbia Univ. Coll. of P. and S.	(1898)	83
New York Homeo. Med. Coll. and Hosp.	(1910) 90; (1911)	83
Medico-Chirurgical College, Philadelphia	(1910)	84
Queen's University, Kingston, Ontario	(1911)	87

FAILED

Maryland Medical College	(1911)	72
College of Physicians and Surgeons, Boston	(1911)	67
Tufts Coll. Med. School	(1905) 79;* (1909) 78;* (1911)	*81
Medico-Chirurgical College of Philadelphia	(1911)	†77
Laval University, Montreal	(1910) 72; (1911)	74

LICENSED THROUGH RECIPROCITY

College	Year Grad.	Reciprocity with
University of Maryland	(1894)	Maryland
Harvard Medical School	(1905)	Penna.

* Fell below 60 in chemistry.
† Fell below 60 in physiology.

Book Notices

A CYCLOPEDIA OF AMERICAN MEDICAL BIOGRAPHY, Comprising the Lives of Eminent Deceased Physicians and Surgeons from 1610 to 1910. By Howard A. Kelly, M.D. Two Volumes. Cloth. Price, $10 net. Illustrated with portraits. Philadelphia: W. B. Saunders Company, 1912.

Dr. Kelly's aim has been to give "a brief outline of the life of every medical worthy who has lived in the United States and in Canada," meaning by "worthy," "a man who has been distinguished, either as an original thinker, a writer, as a teacher or great leader in medicine in any part of the country." Over 1,200 biographies are included.

The chronologic scope of the work is indicated by the fact that it embraces biographies of Lawrence Bohune, first physician-general to the colony of Virginia, of John Morgan, founder of the first medical school in America, and of Joseph Warren, the Revolutionary hero who fell at Bunker Hill, as well as of men whose deaths seem to have occurred but yesterday, like that of Howard Taylor Ricketts, who died in 1910 of typhus contracted during the investigation of its cause. Among them are biographies not only of medical men eminent in the profession, but also of physicians who have been prominent in other walks of life, of notable men whose lives and achievements are rapidly becoming obscure and forgotten and of men who, though not members of the medical profession, have done notable things which have contributed to medicine. To name a few at random, we have Samuel Howe, who was the first to train blind and deaf mutes in America; Amos Twitchell, who tied the common carotid eight months before Sir Astley Cooper performed the same kind of operation; Benjamin Franklin, who invented bifocal lenses for spectacles and investigated many other medical subjects; Hugh Lenox Hodge, who invented the pessary which bears his name; Crawford Williamson Long, who first used ether as an anesthetic; Jesse William Lazear, who laid down his life in investigating the mosquito theory of the transmission of yellow fever; Marion Sims, among whose many achievements in surgery are the invention of the duckbill speculum and the origination of an operation for vesicovaginal fistula; Caspar Wistar, whose memory is perpetuated by the Wistar Institute of Anatomy and Biology, and by the name of the beautiful vine, the wistaria; Benjamin Rush, the "American Sydenham;" Joseph Le Conte, the geologist; William James, the philosopher; Elizabeth Blackwell, the first woman to receive a medical degree; Usher Parsons, the only surgeon on Perry's flag-ship, the *Lawrence*, during the battle of Lake Erie; and many others of greater or lesser fame.

Dr. Kelly remarks that the whole work will be found lacking in uniformity of style and treatment owing to the many writers who have contributed, but that this is no disadvantage except where comparatively unimportant men have received extended treatment that might better have been accorded to those of greater interest and importance. As a whole the work is very interesting, being enlivened by many little anecdotal touches. It is, moreover, of importance as a creditable attempt to meet a real need. The introduction contains signed historical sketches of various medical subjects and Dr. Kelly personally requests that we record his regrets for the accidental omission of the signature of Dr. D. B. Delavan from the end of the summary of laryngology.

THE SURGICAL CLINICS OF JOHN B. MURPHY, M.D., AT MERCY HOSPITAL, CHICAGO. Vol. 1, No. 2. Paper. Price, $8 per year. Pp. 291. Philadelphia: W. B. Saunders, 1912.

The second number of these clinics contains much more matter than the first. It is illustrated with a selection of well-made pictures which help to elucidate the text very considerably. Even a cursory examination discloses the fact that this volume has been edited more carefully than the first number was. It cannot therefore fail to meet with greater approval than its predecessor. Nineteen cases are reported. Among these are cases of ununited fracture, arthritis, tenoplasties, ankylosis in which arthroplasty was done, neuroplasty, sarcoma, ischemic myositis and a Charcot ankle which was nailed successfully.

THE FRIENDS OF THE INSANE, THE SOUL OF MEDICAL EDUCATION AND OTHER ESSAYS. By Bayard Holmes, M.D. Cloth. Price, $1. Pp. 270. Cincinnati: Lancet-Clinic Publishing Company, 1911.

A series of essays covering a wide range of subjects both medical and surgical. Most of them, however, are devoted to psychiatry and contain a rather severe criticism of existing conditions. One is impressed by the evident earnestness and sincerity of the author, who frequently permits himself to be carried away by his fervor to statements which seem hardly justified. The statement cannot be disputed, however, that the methods of commitment of the insane "are, in many states, a relic of barbaric procedure," that the criminologic, sociologic and economic aspects of insanity are sadly neglected, that

the nursing in our state institutions is unsatisfactory, that the medical staffs consist largely of men insufficiently trained in psychiatry and overburdened with routine work, so as to leave no time for scientific endeavor. Proper recognition, however, is not given to the great improvement which the last few years have brought in most of the conditions criticised. Dr. Holmes dwells on the absence of any serious attempts at the scientific study of causes, prevention and cure of insanity in our hospitals for the insane. To him the problem of the etiology is one of biologic chemistry and the time given to psycho-analysis after the methods of Freud and Jung, a waste pure and simple. As a remedy for these evils he suggests that the friends of the insane organize to bring about desired reforms. The first step in this endeavor is to be an agitation which is to lead to the establishment of a laboratory for the investigation of insanity, its causes, etc.; this laboratory to form part of and to be under the control of the state university.

We earnestly recommend the article on "The Soul of Medical Education" to those who are interested in this topic—and that should mean the entire medical profession. Throughout the small volume the versatility of the author and his familiarity with the most advanced ideas is evident.

PHYSIKALISCHE HEILKUNDE. Von Dr. Fritz Frankenhauser. Leitfäden der praktischen Medizin. Von Dr. Ph. Bockenheimer, Berlin. Band 4. Paper. Price, 7.50 marks. Pp. 323, with 77 illustrations. Leipzig: Werner Klinkhardt, 1911.

The author, who is connected with the hydrotherapeutic establishment of the University of Berlin, has written a clear and brief account of physical methods of treating disease. The first section is devoted to exercise and its effect on muscles, nervous system, circulation, digestion, skin, kidneys, etc. The effects of various kinds of exercise such as sports, gymnastics, and massage are described carefully. Rest is also considered, though more briefly. The second section is devoted to thermic methods of treatment. After a consideration of the general subject of bodily temperature, the physical and physiologic effects of different temperatures are discussed. In this section the subject of climate also is described. Air and water baths are then described in some detail. A third section is devoted to light cures; a fourth, to electricity; a fifth, to the influence of physical forces on human beings in their various ages or periods of growth, and the last, to the treatment of various groups of diseases by these forces. The book is well illustrated.

Medicolegal

Validity of Pure Food Municipal Ordinances

(City of Chicago vs. Union Ice Cream Manufacturing Co. (Ill.), 96 N. E. R. 872)

The Supreme Court of Illinois says that the state legislature clearly did not intend by the passage of the pure food act in 1907 to deprive municipal authorities of all power to legislate on subjects touched on or regulated by that act. The pure food act was not intended to deprive cities and villages of the authority to regulate and control, by ordinances not in conflict with the pure food law, the sale of foods, given by the provisions of Article 5 of the city and village act, authorizing cities and villages to make regulations for the promotion of health or suppression of disease. So a city ordinance is not invalid which provides that any person or corporation, or any agent or employee thereof, who shall keep for sale, offer for sale or exchange, or shall sell or deliver or expose for sale, any food which shall be impure, unwholesome, adulterated, or to which any harmful or injurious foreign substance has been added, shall be fined not less than $5 nor more than $100 for each offense. However, municipal authorities cannot, under a general grant of power, such as said Article 5, adopt ordinances which infringe the spirit of a state law or are repugnant to the policy of the state as declared by general legislation, although the police regulations of a municipality may differ from those of the state on the same subject, if they are not inconsistent therewith. The ordinance quoted does not prohibit what the statute permits. While the ordinance attaches a less penalty for its violation than does the statute, the court finds no repugnancy between them. The general policy under both is the same.

Scheme of Pretended Specialist Likened to Bohemian Oats Swindle—Validity of Note Given to Unlicensed Practitioner

(State Bank of Greentown vs. Lawrence (Ind.), 96 N. E. R. 947)

The Supreme Court of Indiana affirms a judgment for the defendant, who was sued on a note given in September, 1905, for alleged medical services. The court says that the uncontroverted facts were that for some years prior to said date the payee of the note, "Doctor" W. A. Magee, was a resident of Chicago, and claimed to be a medical and surgical specialist. He had no license to practice in Indiana. He carried on an extensive system of swindling operations in a number of counties in Northern Indiana. His scheme was somewhat similar to the Bohemian oats swindle, which was used extensively in Indiana some years ago. The plan of the "doctor" was to call on people in the country who were in ill health, and assure them that he could cure them in a definite time, the patient to execute to him a note, due at the end of such time, for the treatment, and he to execute a written agreement to return the note when due if no cure was effected. He then sold the note before maturity.

When the note for $120 sued on in this case was executed, the practice of medicine without a license was prohibited in Indiana, under a penalty of fine. Consequently the note in the hands of Magee was not enforceable, because the consideration therefor was an illegal one. But in the hands of an innocent holder it would be enforceable. However, while the plaintiff bank purchased the note before maturity, for value, it was, in the exercise of ordinary care, under the legal duty to inquire into the consideration of the note, under the facts disclosed by the testimony of its president and cashier, who bought the note.

The officers of the bank knew, or believed, that Magee was a Chicago specialist, and that he was offering to treat eyes and perform operations thereon, and that some of the notes handled by the bank were given for the treatment of eyes. They knew that he called himself a doctor. The treatment of the eyes, either by medicine or by a surgical operation, is prohibited by the Indiana statute, unless the physician or surgeon is licensed. The statute prescribes under what contingencies a physician or surgeon licensed in another state may practice in Indiana. The evidence did not disclose any fact that would have warranted Magee in practicing in Huntington county, Indiana, even if he had a license to practice in Chicago. The note in suit showed on its face that his post-office address was Huntington county. The evidence introduced by the defendant showed that Magee had no license to practice in Huntington county, and that he was a resident of Chicago, Ill. That was sufficient to prove prima facie the allegation that Magee was unlicensed. There was no evidence tending in any way to show that Magee had a license to practice medicine or surgery anywhere. An Indiana statute provides that no judgment shall be reversed where it appears that the merits of the cause have been fairly tried and determined in the court below. The Supreme Court thinks that that statute was applicable here.

City Physician Appointed Without Authority or as an Employee

(Jacobs vs. City of Elmira (N. Y.), 132 N. Y. S. 54)

The Third Appellate Division of the Supreme Court of New York says that the common council of the defendant city appointed the plaintiff city physician at a stated salary. His duty was to attend on the employees of the various city departments and the indigent poor when called on. There was no express provision in the city charter giving power to appoint a city physician, but it had long been the custom of the common council to make such appointments from year to year under its general power "to enter into contracts for services or supplies and order payment of the same, and to

V. 58
1912

provide generally for the welfare of the city." On March 23, 1903, he was appointed to succeed himself. But a new common council, in January, 1904, appointed another city physician in place of the plaintiff. The plaintiff claimed that his appointment, or hiring, continued until the 23rd of March, 1904, and he offered to perform the services during that period. He was not permitted to do so, but, holding himself in readiness, thereafter brought this action and recovered judgment for such part of the year, which judgment was affirmed by the county court, but is now reversed.

The court does not consider that the plaintiff was a city official, for the city charter did not provide for any such office, and it was beyond the power of the common council to create an office which the statute made no provision for. Nor could he be counted an employee of the city. The common council did not have power to enter into a contract with him to give medical treatment to the members of the various city departments, including fire and police, and to attend on the indigent poor of the city. The provision of the charter quoted fell far short of giving even implied authority to enter into a binding contract with him for the rendering of services for a specified time. The common council had no more power to bind the city by a contract with the plaintiff than it had to create the office of city physician and agree to pay a salary. And, while a municipality is bound by contracts which it has the power to make, it is not bound by contracts which its officials have no authority to enter into.

Furthermore, if the plaintiff be deemed a mere employee whom the council had authority to employ at a fixed compensation, the term of his employment must be deemed to be at the pleasure of the appointing power notwithstanding a definite term was fixed. In other words, the plaintiff, even if the common council had power to employ him, could have resigned before the expiration of the time specified without making himself liable for damages; and so could the common council terminate his employment without subjecting the city to damages for failure to fulfil the contract on its part. The city made an offer of judgment to the amount of the plaintiff's salary for the time he actually served and until his successor was appointed. That sum was the only sum which he was entitled to recover.

V. 58
1912

Current Medical Literature

AMERICAN

Titles marked with an asterisk (*) are abstracted below.

Texas State Journal of Medicine, Fort Worth

May, VIII, No. 1, pp. 1-30

1 *Preservation and Restoration of Tendon Function. W. L. Brown, El Paso.
2 Perforating Duodenal Ulcer: Report of Case. A. I. Folsom, Dallas.
3 Cause and Effect in Gynecologic Practice. M. Duggan, San Antonio.
4 Local Medical Examiner, Medical Director, Insurance Company and Public Health. M. M. Smith, Dallas.
5 Relation of Patient and Physician; What Is Confidential and What Is Not. C. E. Mays, San Angelo.
6 Errors of Refraction. N. H. Bowman, Memphis.

1. **Tendon Function.**—Emphasis is laid by Brown on the fact that limbs should not be too long or too continuously immobilized in fractures, because of the danger to the future tendon function. Great caution should be used in making incisions for cellular tissue infections, to see that the tendon sheaths are not unnecessarily opened or the tendons severed by making reckless incisions without due regard to these structures. The permanent disability of many hands has been due as much to improper incising of abscesses as to the infection. All recent wounds of tendons should be immediately repaired, and if surroundings are not such as to justify this procedure, they should only be temporarily dressed until such time as the tendons may be properly repaired. In the repair of every tendon, from either recent or old injury, the field should be rendered absolutely bloodless and a careful dissection made. In the repair of every tendon, whether recent or old injury, a new sheath should be provided in place of that destroyed, that the future function of the repaired tendon may not be reduced because of adhesions. The most practical method for constructing a new sheath is to use subcutaneous areolar tissue. Cargile membrane, sections of veins, etc., have been used, but not with satisfactory results. In operating to restore function to tendons that have had old injuries or infection, all scar tissue should be carefully dissected away. After all tendon repairs complete immobilization should be sustained for three weeks, then passive motion begun cautiously. Tendons have almost no blood-supply, and consequently heal slowly. Immobilization should be in the position which will give the tendon greatest relaxation. In amputations at the wrist or ankle joints, or through the leg or forearm, in the presence of infection, all the larger tendon sheaths should be split open, the tendons pulled down and cut as high as possible and the larger tendon sheaths drained through separate incisions after they have been thoroughly swabbed out with tincture of iodin. All elective operations on tendons should be preceded by a thorough study of the anatomy of the parts, then first performed on the cadaver, after which surface measurements are carefully made in order that the dissection may be made with as little trauma to the tissues as possible.

Journal of Tennessee State Medical Association, Nashville

April, IV, No. 12, pp. 473-516

7 Peritonitis. R. A. Barr, Nashville.
8 Appendicitis, Its Topographic Variations and Treatment. J. B. Haskins, Chattanooga.
9 Staphylococcus Infections of Skin. E. D. Newell, Chattanooga.
10 Tracheiorrhaphy. G. R. West, Chattanooga.
11 Vaccination. S. S. Moody, Shelbyville.
12 Chronic Gonorrheal Semino-Vesiculitis. R. M. Colemore, Chattanooga.

Surgery, Gynecology and Obstetrics, Chicago

May, XIV, No. 5, pp. 525-536

13 Stereoscopic Photography with Natural Colors. E. G. Beck, Chicago.
14 Surgical Diseases of Pancreas. M. H. Richardson, Boston.
15 Surgery of Biliary Passages. G. E. Brewer, New York.
16 Surgical Pathology of Stomach and Duodenum. J. F. Binnie, Kansas City, Mo.
17 Coordination of Undergraduate and Postgraduate Teaching of Clinical Surgery with View to Securing Efficiency. A. J. Ochsner, Chicago.
18 *Fibrous Atrophy of Parotid, with Special Reference to Treatment of Salivary Fistula. D. Tait, San Francisco.
19 Apparatus for Thoracic Surgery Under Intratracheal Insufflation or Positive Pressure; Also for Ether Anesthesia by Mask, Intrapharyngeal, Intratracheal and Intrabuccal Methods. S. Robinson, Boston.
20 *Secondary Parotitis Following Operations for Appendicitis. J. Frank, Chicago.
21 Report of Ninety-Three Cases of Circular Valve Gastrostomy. E. J. Senn, Chicago.
22 Rupture of Pyosalpinx as Cause of Acute Diffuse Purulent Peritonitis. W. M. Brickner, New York.
23 Umbilical Tumors Containing Uterine Mucosa or Remnants of Müller's Ducts. T. S. Cullen, Baltimore.
24 Compiled Report on Certain Questions Relating to Appendicitis. W. Hessert, Chicago.
25 Choice of Technic in Enterostomy Incident to Operations for Intestinal Obstruction. J. P. Lord, Omaha, Neb.
26 *Artistic and Mathematically Accurate Method of Repairing Defect in Cases of Harelip. J. E. Thompson, Galveston, Tex.
27 *Rare Fracture and Its Treatment. P. F. Rogers, Milwaukee, Wis.

18. **Fibrous Atrophy of Parotid.**—The following is a summary of Tait's views: Atrophic sclerosis of the parotid gland follows obstruction of Steno's duct. Its extent is in direct proportion to the degree and duration of obstruction. The addition of an element of infection may hasten the hyperplastic process. Distention of the duct may persist long after the gland has undergone almost complete fibrous atrophy. Fistula of Steno's duct may be permanently cured by double ligation and section of the duct as close as possible to the gland. Operations on the bacterially rich outer third of Steno's duct are much more frequently followed by fistula than are similar interventions on the inner third of the duct. The effects of incomplete obstruction (stenosis) of the salivary ducts are frequently found in the parotid and submaxillary glands where, by simulating malignancy, they may lead to grievous mistakes in surgical therapy. In experiments on duct obstruction (glands, pancreas, liver, testes, kidney, etc.) single ligation should never be resorted to; the only reliable method is double ligation and section.

20. **Secondary Parotitis.**—Frank regards it as highly probable that secondary parotitis is due to an ascending infection of Stenson's duct. The onset of this complication may be prevented by attending to the following details: (a) Mouth carefully cleansed before and after operation. (b) Everything used for the anesthetic should be sterile. (c) The anesthetizer should avoid pressure on the gland while attempting to elevate the jaws during anesthesia. When the swelling does not show any tendency to decrease in size in about four days, it is advisable not to wait for fluctuation, as the location of the pus is beneath the dense parotid fascia. Therefore, free incision and drainage should be resorted to early.

26. **Repairing Defect in Harelip.**—In order to obtain a satisfactory result from any operation for harelip, Thompson says the following requirements must be satisfied: 1. The red line of the lip must extend in a clean, unbroken curve from one side of the newly formed lip to the other. 2. The depth of the mucous membrane must be equal on each side of the line of suture. 3. The newly formed lip must not be too short, but must be lengthened so that it will more than cover the gums. 4. The nostril must be reproduced so as to have exactly the same dimensions as the sound nostril and must consist of tissue of the same texture as the normal nostril. 5. There must be no flattening of the nose or ala nasi on the affected side. For the last fifteen years he has been operating by a method which he believes has given results that satisfy fully the first four requirements. Every incision is carefully and accurately measured by the simple expedient of pricking out the beginning and end of a cut with a pair of sharp pointed compasses. Incisions made into the lip on one side of the cleft must always be of the same length as those on the other side, if the sides are to fit accurately. No tucking in of the skin is allowable, as in other regions of the body, and if it is attempted the result will be disastrous, for it is sure to lead to ugly elevations, depressions and irregularities. The mucous membrane, on the other hand, is more extensible than the skin, but as it is essential to unite mucous membrane to mucous membrane only, it is equally necessary here to have incisions of same length on each side of cleft. For a detailed description of the method the original must be consulted as it is freely interspersed with cuts.

27. **Rare Fracture.**—A man looked over the top of the gate guarding the entrance to the elevator shaft which passes up through his ware-room. The elevator, just then descending, caught him about midway between the occiput and the vertex, and, his mouth being open, the superior maxillary arch was jammed squarely down on the top of the gate, leaving a perfect print of the arch where the teeth bit into the solid oak. Fortunately the elevator boy, happening to glance down the shaft, took in the situation an instant before the contact and applied the brake just in time to avoid crushing the man's skull. As it was, the scalp for a width of five or six inches was scraped off the vertex forward to the superciliary ridge and in the median line the skull was planed bare. The lower lip was somewhat lacerated by the teeth, but not a tooth of either upper or lower jaw was broken or even loosened, and yet the superior maxilla was completely severed from all its bony attachments in a plane just above the nasal floor and dropped down into the buccal cavity like an ill-fitting plate making articulation difficult. Finally Rogers made a very small vertical incision over the front end of the zygomatic arch, down to the bone. A long, spear-shaped needle with an eye near its point was then thrust down to the inner side of the zygoma, emerging close alongside the upper third molar. One end of a fairly heavy aluminum-bronze wire which had been previously looped and twisted tight about the neck of the tooth was threaded into the eye, bent sharply on itself and the spear withdrawn. The latter being disengaged was again inserted through the small incision and forced down outside the zygoma, emerging at exactly the same point and the other end of the wire was similarly threaded and drawn out. This operation being duplicated on the other side, the two sets of wires were pulled firmly upward until taut and were then twisted tightly over the zygoma, the ends being allowed to protrude through the skin. This brought the maxilla firmly up against its broken supports and allowed perfect occlusion of the teeth. A small collodion dressing was applied on each side. The wires gave very little discomfort. In removing them, a brief anesthetic was given, the wires were cut inside the mouth and pulled out by the projecting ends and the loops were slipped off over the teeth. The result was perfect.

Virginia Medical Semi-Monthly, Richmond

May 10, XVII, No. 387, pp. 53-80

28 Preventive Medicine. A. J. Burkholder, Staunton.
29 Syphilis, Diagnosis and Treatment. G. B. Tribie, Washington, D. C.
30 General Diet in Typhoid, Report of 200 Cases. G. C. Rodgers, Elkins.
31 Diagnosis of Surgical Conditions of Ureter by Means of Roentgen Ray. D. D. Talley, Richmond.
32 Rheumatic Diseases of Eye and Throat. C. R. Dufour, Washington, D. C.

Journal of Missouri State Medical Association, St. Louis

May, VIII, No. 11, pp. 413-450

33 *Use of Restraint in State Institutions for Insane, with Some Suggestions for Its Reduction. E. H. Trowbridge, St. Joseph.
34 Differential Diagnosis of Ulcers of Nose and Throat. H. C. Creveling, St. Louis.
35 Goiter: Its Medical and Surgical Treatment. C. O. Dewey, Breckenridge.
36 Puerperal Infection. W. R. Beatie, Marshfield.
37 *County Society: What It Should Do to Advertise the Quack. H. E. Songer, Jamesport.
38 County Medical Society; Its Use to Profession and Public and Technic of Its Administration. E. L. Stewart, Kansas City.
39 Practical Problems in Ear, Nose and Throat Practice. R. Barclay, St. Louis.
40 *Notes, Chiefly Therapeutic, on Various Diseases of Skin. W. A. Hardaway, St. Louis.

33. **Restraint in State Institutions for Insane.**—By using the following methods Trowbridge has reduced his mechanical restraints to naught; but seclusion at times is necessary in a very few cases for short periods. The violent, disturbed patient, after well-applied hydrotherapeutic treatment, placed in seclusion for a time, quiets down nine times out of ten and usually goes to sleep. The straight-jacket will not quiet his screaming or soothe his irritable mental condition. Instead, it has a tendency to aggravate him and he becomes even more violent and uncontrollable. For chronically disturbed patients hydrotherapy is most quieting. These patients are, as a general rule, more or less destructive to their clothing. To overcome this Trowbridge has them wear one-piece suits made of extra strength denim cloth, which is laced up the back. This will suffice for the average case; but if necessary their fingers are wrapped separately with adhesive tape to the second joint; the use of adhesive in this way also prevents the average patients from digging or scratching themselves. Again, there is a class of patients who are physically weak, such as the senile dements or failing paretics, who are continually getting out of bed at night and wandering round. To prevent this, use detachable side-boards for the beds which extend about 18 inches above the mattress, allowing the patient perfect freedom in bed. It is very unusual to have these patients try to climb over the side-boards during the night. The one class of patients that are hard to handle are the disturbed patients with tendencies for self-injury; but close attention to their case, with well-applied hydrotherapy combined with limited seclusion, will work wonders. Work, such as that on the farm for those who are able, plenty of outdoor air for those unable to work, good, wholesome food, amusements such as dances and moving picture shows will, with the above few suggestions, reduce restraints and one will have fewer disturbed patients than ever before.

39. **County Society and the Quack.**—While teaching the people how to choose between the honest physician and the quack, Songer says we may at the same time instruct them how to choose between the man who attends the society meetings and keeps up with the times and the man who never goes to a society, who takes no medical journals, who buys no new books, has a dirty, filthy office, is found either on the street loafing, telling funny stories, or in a card game or a game of checkers. Teach them how to differentiate between the two and in so doing it will aid in getting men into our societies who now pay very little if any attention to their county society. In organization there is union, and in union

V. 58 1912

there is strength. Teach the people that it is for their interest that physicians are working in society meetings, that it is for their interest that physicians leave their homes and business to attend these meetings; then will the people and their representatives be in a position to vote intelligently on medical questions when they come up in the legislature, for the public does as it is taught.

40. **Skin Diseases.**—The internal treatment of urticaria Hardaway says consists in the administration of 5 or 10 grains each of a powder containing subcarbonate of bismuth and carbonate of magnesium every three or four hours, coupled with the liberal drinking of Vichy water, which should be fortified with a pinch of sodium bicarbonate on each occasion that the Vichy is drunk. The local application of menthol, carbolic acid, tar, etc., give at least temporary relief. When carbolic acid, or the tincture of mineral tar is used, it acts best when sprayed on with an atomizer.

℞ Phenolis (vel tinct. picis mineralis) 3ii
Glycerini 3ss
Aquæ, q. s. ..... ad 3xvi

M. S.: Mop on with a rag or use as a spray.

A prescription containing menthol, and carbolic acid added to zinc lotion (non-sprayable) is the following:

℞ Mentholis 3i-ii
Alcoholis ..... q. s.
Phenolis ..... m.xx-xl
Zinci oxidi 3iv
Pulv. calaminæ præp ..... ℥ iv
Glycerini 3ii
Liq. calcis 3ii
Aquæ, q. s. ..... ad 3viii

M. S.: Mop on with rag.

McIntosh's cream is sometimes better borne than any form of lotion.

℞ Bismuthi subnitratis 3ii
Zinci oxidi 3ss
Glycerini 3iss
Phenolis ..... m.xx-xxx
Vaselini 3vi

M. S.: Apply with finger or brush.

Interstate Medical Journal, St. Louis

May, XIX, No. 5, pp. 399-486

41 Serum Treatment for Hyperthyroidism. S. P. Beebe, New York.
42 What Is Internal Secretion? E. L. Opie, St. Louis.
43 Insidious Chronic Appendicitis. M. J. Lichty, Cleveland.
44 Clinical Indications for Major Operations on Temporal Bone and Their Pathologic Interpretation. E. T. Senseney and L. K. Guggenheim, St. Louis.
45 Scorpion Venom. H. V. Jackson, Durango, Mexico.
46 Surgical Treatment of Intestinal Stasis. J. Y. Brown St. Louis.
47 Version in Transverse Presentations Resulting from Thigh-Pressure Produced by Posture. A. F. A. King, Washington, D. C.
48 Pentosuria. E. D. Watkins, Memphis, Tenn.

Journal of Nervous and Mental Diseases, Lancaster, Pa.

May, XXXIX, No. 5, pp. 289-360

49 Bilateral Supranuclear Paralysis of Upper Facial Distribution. H. Carncross, Philadelphia.
50 *Intermittent Claudication in Upper Extremities. E. M. Williams, Philadelphia.
51 Acute Delirium in Psychiatric Practice, Special Reference to So-Called Acute Delirious Mania (Collapse Delirium). E. L. Hanes, Rochester, N. Y.

50. **Claudication in Upper Extremities.**—The case cited by Williams presents unusual symptoms, in the absence of any involvement of the lower limbs, in the almost continuous pain present, this extending even through the interparoxysmal periods, and in the absence of any abuse of the system that might, by a toxemia, cause arterial changes, but with an indirect cause apparently in frequent exposure to cold and over-exertion, with the possibility of an acutely exciting cause in an attack of influenza.

Journal of Medical Society of New Jersey, Orange

May, VIII, No. 12, pp. 611-664

52 Ideals of Profession of Medicine. F. S. Meara, New York.
53 Consideration of Surgical Diseases of Upper Abdomen. L. J. Hammond, Philadelphia.
54 Prophylaxis of Scarlet Fever. F. H. Pierson, Elizabeth.
55 Hypertension. W. Martin, Atlantic City.
56 Cerebral Diagnosis. F. D. Gray, Jersey City.
57 Specialties and Specialists. J. H. Clark, Newark.
58 National Department of Health and National League for Medical Freedom; or Organized Medicine vs. Organized Quackery. W. J. Robinson, New York.

American Journal of Public Health, New York

April, II, No. 4, pp. 223-314

59 Typhoid in Rural Virginia. A. W. Freeman and L. L. Lumsden, U. S. P. H. and M.-H. Service.
60 North Carolina Campaign Against Uncinariasis. J. A. Farrell, Raleigh, N. C.
61 Bacteriologic Study of Milk-Supply of Washington, D. C. J. J. Kinyoun and L. V. Dieter, Washington, D. C.
62 Portable Outfit for Determination of Visible Dirt in Milk. F. O. Tonney, Chicago.
63 *Sterilization of Milk Bottles with Calcium Hypochlorite. H. A. Whittaker and B. M. Mohler, Minneapolis, Minn.
64 Treatment of Baltimore Drinking Water by Means of Calcium Hypochlorite. W. R. Stokes and F. W. Hachtel, Baltimore.
65 Distribution of Cases Among Several Producers in Epidemics of Non-Milk-Borne Infectious Disease. W. T. Carpenter, Cincinnati.

63. **Sterilization of Milk Bottles.**—The investigations conducted by Whittaker and Mohler have been confined to a determination of the relative efficiency of various solutions of calcium hypochlorite in the sterilization of milk bottles. A number of dairies were visited and the work was done on the spot with the apparatus actually in use by the dairymen at that time. The milk bottles used in the experiments were selected from those already cleaned and ready for refilling with milk for distribution. A solution of calcium hypochlorite of known strength was carried so that a definite amount could be added to the local water used in the process of treatment. During the investigation the amount of chemical rendering efficient results was reduced from 20 to 10 parts per million of available chlorin and the time of exposure from one hour to twenty minutes. The summary of results computed from the average results under the conditions indicated, show a removal of over 99.9 per cent. of the bacteria by this treatment. From the results it appears that by submerging milk bottles in a water to which calcium hypochlorite in the amount of 19 parts per million of available chlorin has been added, a very marked reduction in the bacterial count is effected. An examination was made of the organisms remaining after treatment on the plates from two dairies and over 95 per cent. of these organisms were found to be spore bearers.

Western Medical Review, Omaha, Neb.

May, XVII, No. 5, pp. 335-396

66 Fly as Communicator of Disease. W. H. Wilson, Lincoln.
67 Prostatectomy. A. I. McKinnon, Lincoln.
68 Prevention of Colds. D. C. Hilton, Lincoln.
69 Tuberculous Meningitis. P. M. Conlin, Omaha.
70 Treatment of Puerperal Infection. J. S. Lancaster, York.
71 Methods of Skin Grafting. F. B. Hollenbeck, Lincoln.

Cleveland Medical Journal

April, XI, No. 4, pp. 241-316

72 Newer Meaning of Symptoms in Hysteria. G. M. Parker, New York.
73 *Syphilis and Amentia: 1,050 Cases with Special Reference to Serologic Findings. W. C. Stoner, Cleveland, and E. L. Keiser, Columbus.
74 *Roentgentherapy of Leukemia. G. F. Thomas, Cleveland.
75 Causes of Perforation of Nasal Septum. W. B. Chamberlin, Cleveland.
76 Two Cases of Injury to Eye by Pieces of Steel, One a Double Perforation. C. C. Stuart, Cleveland.

73. **Serum Reaction in Amentia.**—Stoner and Keiser found 83 or 7.9 per cent. positive Wassermann reactions in their series of 1,050 cases of all grades of amentia. They found nothing strikingly suggestive in the way of common characteristics in any clinical class of the positive cases and are unable to formulate any conclusion that congenital syphilis acts in a definite way. Notwithstanding the well established fact that congenital syphilitics lose their antibody content with age they found a number of positives past middle life. One case at the age of 61 years showed a positive reaction; this is much older than other observers have found the reaction positive in congenital syphilis. It shows that the specific antibody content is not markedly lost with age. Two paralytic cases seemed to be progressive. This and the relatively high per cent. of positives in this class make syphilis suggestive as an important causative factor. Two of the paralytics showed

Hutchinson teeth but no other ear-marks of syphilis. No definite history of congenital lues in any of these cases was obtainable. Tredgold says 80 per cent. of all cases of amentia are due to a morbid heredity, which includes all forms of nervous instability as well as alcoholism, tuberculosis, syphilis, etc. Of the cases in this series showing a positive reaction, 80 per cent. show a morbid heredity and 40 per cent. a neuropathic heredity; in 15.6 per cent. of the cases the history was unattainable; 14.4 per cent. of the positive cases show clinical signs of inherited syphilis. The classification of the eighty-three positive cases, according to the Binet test, is as follows: Idiot, seventeen or 20.4 per cent. Imbecile, forty or 48.1 per cent. Moron, twenty-three or 27.7 per cent. Backward, three or 3.6 per cent.

74. **Roentgen-Ray in Leukemia.**—During the past five years Thomas has had opportunity to observe the results of Roentgen-ray treatment in six cases of leukemia of the splenomyelogenous type. Four of these patients followed the usual habit of discontinuing treatment as soon as the beneficial effect of the Roentgen-ray made them feel perfectly well and enabled them to resume their usual pursuits. The only facts of importance taught by these cases are that under proper dosage almost hopeless cases will respond rapidly to treatment; that this improvement is marked enough to cause the patients to feel that they are practically cured; that after cessation of treatment the disease recurs; and finally, that these recurrences are also amenable to treatment, though the response is successively less satisfactory. In none of the cases treated were there any untoward results of Roentgen radiation, such as toxemia or burns. Thomas believes that Roentgen-ray treatment is the best therapeutic agent so far suggested for leukemia, the least dangerous, the most uniform and the most permanent. The Pancoast method is the most rational and most successful form of Roentgen-ray treatment. Under favorable conditions the leukemic patient may be restored to comparative health in a few weeks and his length of life increased by a period of three to six years. During this period of increased life he is comparatively free from distressing symptoms.

Ohio State Medical Journal, Columbus

May 15, VIII, No. 5, pp. 241-286

77 The Smith Intracapsular Extraction of Cataract. A. Timberman, Columbus.
78 Penetrating Wounds of Abdomen. F. Fee, Cincinnati.
79 Huntington's Chorea, with Report of Cases. C. C. Kirk, Toledo.
80 Use of Antitoxin in Prevention of Diphtheria. D. O. Weeks, Marion.
81 Macular Choroiditis. C. C. Stuart, Cleveland.

American Medicine, Burlington, Vt.

April, VII, No. 4, pp. 179-232

82 Auditory Vertigo and Tinnitus Aurium. A. A. Gray, Glasgow, Scotland.
83 Therapeutics of Uric-Acid Diathesis. O. L. Mulot, Brooklyn.
84 First Woman Practitioner of Midwifery and Care of Infants in Athens, 300 B. C. G. T. McMaster, New Haven, Conn.
85 Influenza in Infants and Children. H. Schwarz, New York.
86 Influenzal Meningitis. G. R. Plack, New York.
87 Complication of Influenza Affecting Ear, Nose and Throat of Children. S. Oppenheimer, New York.
88 Pulmonary Abscess Associated with Influenza. W. P. Northrup, New York.
89 Treatment of Cancerous Growths with Selenium Compounds. F. von Oefele, New York.
90 *Diagnostic Value of Intradermal Injection of Gonococcus Vaccine. J. London, New York.

90. **Gonococcus Vaccine.**—In testing out a number of cases for the reaction by vaccination of gonococcus vaccine in saline solution, London's results were negative, but in the same patients the same vaccine injected into the skin showed a beautiful result similar to the "stich" reaction obtained by Hamburger and by Manheimer in tuberculin diagnosis. London calls attention to the diagnostic value of this method of intradermal injection of a few drops of gonococcus vaccine, 50,000,000 to 100,000,000 per c.c. in saline solution. In positive cases an area of erythema develops from one to three inches in diameter, in the center of which there is a small red papule, a little deeper in color than the surrounding areola. This central papule is really composed of two parts, one at the site of needle puncture and the other at the periphery of injection. Normal saline solution may be used as control, but is not necessary as London has used a few drops of a solution containing 500,000,000 per c.c. without any reaction in negative cases. Oftentimes the entire area of reaction is slightly elevated. Adjacent lymph-nodes are not enlarged. In negative cases there is no reaction or yellowish discoloration at site of injection. The reaction appears in from twelve to twenty-four to forty-eight hours, the central papule being the last to disappear.

Journal-Lancet, Minneapolis

May 1, XXXII, No. 9, pp. 225-252

91 Cancer Problem. J. C. Stewart, Minneapolis.
92 Some Ideas on Aborting Gonorrhea. F. R. Wright, Minneapolis.
93 Two Cases of Sporotrichosis. G. F. Ruediger, Grand Forks, and O. Smith, Manning, N. Dak.

Bulletin of Manila Medical Society

March, IV, No. 3, pp. 41-66

94 Report of Certain Diseases in Korea. R. G. Mills, Seoul, Korea.
95 Some Inquiries Regarding Sprue. P. M. Ashburn, Manila.
96 *Senile Phimosis. A. M. de Silva, Colombo, Ceylon.

96. **Senile Phimosis.**—Three anomalous cases of phimosis are reported by deSilva. The patients were all old subjects, men over 60; they were able to draw the prepuce backwards and forwards freely when they were young men and also during middle-age; but for many years their sexual power has been lost and they have been unable to draw the prepuce backward. On examination the orifice of the prepuce was reduced to a pin-hole size and the entire prepuce shrunken and in close contact with the glans. They were treated by circumcision under local anesthesia. At the operation the foreskin was seen to be free and not adherent to the glans anywhere and there were no collections of smegma, as usually is seen in congenital cases. There were no ulcers or papillary growths on its surface. The whole prepuce felt thick, but specially so at its orifice. Microscopic examination in two cases showed the hyperplasia to be composed of simple fibrous tissue, there was no evidence of malignancy anywhere. These patient's troubles were not due to enlargement of the prostate because no sooner was circumcision performed than their urinary difficulties vanished. DeSilva considers the condition an atrophic change taking place in old people, in consequence of which the prepuce gets shortened and shrunken, its orifice is narrowed and it comes to lie close against the glans.

Lancet-Clinic, Cincinnati

May 4, CVII, No. 18, pp. 479-504

97 General and Dietetic Treatment of Typhoid. G. Dock, St. Louis.
98 Relation of Scoliosis to School Life. R. W. Lovett, Boston.
99 Feeding of Children from Bottle to Puberty. E. Campbell, Cincinnati.
100 Typhoid. L. Heimann, Evansville, Ind.

May 11, CVII, No. 19, pp. 505-530

101 Mechanical (Non-Surgical) Treatment of Splanchnoptosis. E. Gallant, New York.
102 Pulmonary Tuberculosis as Studied by Stereo-Roentgenogram. K. Dunham, Cincinnati.
103 *Suture of Bullet Wound of Lung with New Method of Closing Pleural Defects. J. L. Ransohoff, Cincinnati.
104 Inguinal Hernia Under Local Anesthesia, with Report of Cases. A. H. Barkley, Lexington, Ky.
105 Care of Inebriates at Home. T. A. Williams, Washington, D. C.

103. **Suture of Bullet Wound of Lung.**—Ransohoff describes his method as follows: The rib adjacent to the bullet wound is rapidly resected and the pleura widely opened. The search for the bleeding point can only be successful if that lobe of the lung in the direct course of the bullet wound is grasped and delivered through the incision. The bleeding may be temporarily controlled by pressure on the root of the lung. The method of permanently controlling the bleeding is adequately described in the case report. After the bleeding is stopped, the pleura should be washed clean of blood and clots and the wound closed without drainage. The wound must be closed in layers, hermetically sealing the pleural cavity. If this is not done, the pneumothorax, which is invariably present, is likely to be complicated by infection. In the event of this unfortunate complication supervening the prognosis becomes grave. The most interesting feature of the case cited by him is the use of the fascial flap as a substitute for pleura.

V. 58
1912

Medical Record, New York

May 18, LXXXI, No. 20, pp. 927-972

106 *Neurology of Voluntary Movement. G. V. Dearborn, Cambridge, Mass.
107 Vaccination of Tuberculous; Dual Existence of Contagious Diseases. J. J. Walsh, Scranton, Pa.
108 *Passing of Bismuth Paste. W. Blanchard, Chicago.
109 Pneumonia Simulating Localized Peritonitis. Typhoid Observed During Incubation Period. H. F. L. Ziegel, New York.
110 Treatment of Tuberculosis. C. G. Am Ende, New York.
111 New Crutch for Exposing Perineum. C. A. Bucklin, New York.

106. **Neurology of Voluntary Movement.**—The main thesis of Dearborn's paper is succinctly stated in three sentences, thus: As a necessary preliminary to the exact neurology of the will, every deliberate movement, however simple, must be accorded a personal motive, often intricate, whose factors, in part merely neutral, must be sought for. Each of these factors, psychologic or physiologic, implicit in a voluntary movement, has as its concomitant a functional set of nervous impulses. Because of the variety and complexity of the factors determining it, every deliberate movement must be considered the resultant of influences coming from practically every part of the brain or even of the entire gray fabric of the nervous system.

108. **Passing of Bismuth Paste.**—Having treated 106 cases of sinuses from tuberculous bone disease very successfully with bismuth paste, and having treated 152 cases even more successfully with a nontoxic substitute, Blanchard offers a vigorous protest against further use of bismuth paste.

The ideal paste for flooding tuberculous sinuses and filling pus cavities must be nontoxic and absorbable. It must sufficiently solidify at body temperature to crowd out the pus, compress the unhealthy granulations, and exclude the air. The following formula for a sinus-flooding paste is offered by Blanchard and he says it meets every requirement and is entirely innocuous. Formula 1: White wax, 1 part; vaselin, 8 parts; mix while boiling.

Iodin may be added in badly infected cases. Iodin scales can be reduced to a powder by the addition of 20 per cent. of potassium iodid. One, two or more grains may be put in a small cup. The usual glass syringe should be filled with the hot paste. Half the contents of the syringe must now be injected into the cup and the nozzle of the syringe used to mix the iodin powder into the hot paste. When this mixture is drawn into the syringe the fresh iodin is rather unevenly distributed in the hot paste and it is ready for use. Immediately after injecting the sinus a thick pad of gauze saturated with alcohol should be bound over the opening. The evaporation of the alcohol cools and hardens the paste and prevents its escape. In some cases it is well as a preliminary step to get a skiagram showing all the sinus ramifications and pus pockets. For this purpose Blanchard is injecting sinuses with the following mixture. Formula 2: Iron subcarbonate, 1 part; white vaselin, 2 parts; mix and boil.

The iron makes as good a skiagram for diagnostic purposes as the bismuth, without its dangers.

The results in over 150 cases of old tuberculous sinuses flooded with the wax-vaselin-iodin paste showed about 35 per cent. cured by from one to eight treatments. Thirty per cent. more were cured in a year and about 35 per cent. remained unimproved. This last 35 per cent. had retained sequestra or were amyloid and hopeless. The ultimate results of cases cured show just about the same with the wax-vaselin-iodin paste as with bismuth paste. But in the uncured and the relapsing cases the advantages of the wax-vaselin-iodin treatment were very great. There were no deaths. There were no cases of poisoning with a painful train of symptoms. There were no cases in which the sinuses and pus sacs were clogged by the heavy bismuth settling down and becoming permanently residual. Blanchard claims that in occasional favorable cases the abscess stage of tuberculous hip or other joint disease may be cut short by opening the cold abscess with a small puncture, draining it by mild manual pressure and filling it to its full capacity with a thick paste so as to completely exclude the air and keep the sac sterile till it becomes obliterated. For this purpose the following is said to be an excellent paste. Formula 3: White wax, 3 parts; soft paraffin, 2 parts; white vaselin, 24 parts; mix while boiling. This abortive treatment can succeed only when the abscess shows on the surface, the area of tuberculous destruction is small and the quantity of pus is limited. Fully 70 per cent. of the old neglected or unfortunately treated cases of Pott's disease and tuberculous hip disease with from two to a dozen sinuses and a constant semiserous, slightly pus-colored discharge were cured in from a week to three months.

Canadian Medical Association Journal, Toronto

May, II, No. 5, pp. 366-460

112 Inflammatory Cysts and Cancer of Breast. O. Klotz, Pittsburgh.
113 Some Acute Abdominal Emergencies. H. A. Bruce, Toronto.
114 Disinfection in and After Infectious Diseases. W. T. Connell, Kingston.
115 Wassermann Reaction. R. P. Campbell and F. S. Patch, Montreal.
116 Tabes Dorsalis: Exhaustion Theory with Experimental Evidence. C. K. Russel, Montreal.

Boston Medical and Surgical Journal

May 16, CLXVI, No. 20, pp. 723-758

117 Gui Patin: His Life and Character as Contained in His Letters. A. N. Blodgett, Boston.
118 Gonorrheal Arthritis. J. W. Sever, Boston.
119 *Cold-Water Cure for Nervous Dyspepsia. A. E. Austin, Boston.
120 *Hemoptysis; Its Significance and Treatment at Out-Patient Departments, Dispensaries and in Private Practice. J. B. Hawes, Boston.
121 *Prevention of Ophthalmia Neonatorum. R. C. Mackenzie, Boston.
122 Salvarsan and Measles: Clinical Note. L. L. Williams, Boston.

119. **Cold-Water Cure for Nervous Dyspepsia.**—The cold sponge, the cold plunge and the cold water clyster are the agents employed by Austin in the treatment of this condition.

120. **Hemoptysis.**—At the Out-Patient Department of the Massachusetts General Hospital from July, 1903, to Jan. 1, 1912, 114 patients came to the hospital because of hemoptysis. Of these 114 patients, nine were children 15 years old or less. In six of these pulmonary tuberculosis was considered to be the cause of the bleeding. Seventy-eight patients, or 68.3 per cent. of the total number, were either strongly suspected or proven to have pulmonary tuberculosis. Of these seventy-eight patients, eleven were at once admitted into the hospital on account of active hemorrhage while in the out-patient department. Here they were given careful study, treatment and advice. Twenty-eight of these patients, or 35.8 per cent. of the total number diagnosed as pulmonary tuberculosis or strongly suspected of having it, never returned and thus received no adequate treatment for their condition. In order to properly handle patients with pulmonary tuberculosis, or patients suspected of having it, in large out-patient clinics or dispensaries, Hawes says there should be a special department devoted to this work. The general practitioner should bear in mind that unless there is definite evidence to the contrary and a source for the bleeding found in the gums, throat, nose or elsewhere, a hemorrhage from the mouth means pulmonary tuberculosis and should be treated accordingly.

121. **Prevention of Ophthalmia Neonatorum.**—The fact that there were 388 newly-born infants admitted to the wards of the Massachusetts Charitable Eye and Ear Infirmary in a period of four years Mackenzie says means something. Of these 388 babies, twenty-three were discharged from the hospital totally blind and forty-two partially so, all so disabled that their future livelihood is made seriously more difficult. The vision of sixty-seven was affected at the time of their appearance at the hospital. Of this series of cases, 272 were attended at birth by physicians in private practice, thirty by dispensary physicians, sixty-three by physicians in hospitals, three by doctors employed by the city, ten by midwives, three were unattended, and in five cases the attendant could not be determined. Of the sixty-five babies who became blind or partially so, there were fifty-five cases or over 20 per cent. of all those occurring in private practice, four cases or about 6.3 per cent. of all attended by hospital physicians, and three cases, or 33.3 per cent. of those attended by midwives.

Maryland Medical Journal, Baltimore

May, LV, No. 5, pp. 105-130

123 Tribute to Minotaur. J. R. Kean, Washington, D. C.
124 Ulcers of Pyloric Region: Case of Pylorectomy. H. B. Stone and E. B. Freeman, Baltimore.

New York Medical Journal

May 18, XCV, No. 20, pp. 1021-1072

125 Treatment of Prolapsus of Uterus with Attendant Cystocele and Rectocele. J. R. Goffe, New York.
126 Apophysitis of Os Calcis. J. W. Sever, Boston.
127 Eye Training for Cure of Functional Myopia. W. H. Bates, New York.
128 Mechanotherapeutics of Muscular Torticollis. E. F. Cyriax and A. Kellgren-Cyriax, London.
129 Fragment of Glass Irrigating Nozzle Removed from Bladder Without Open Operation. V. C. Pedersen, New York.
130 Conditions Resulting from Ritual Circumcision. F. Bierhoff, New York.
131 Treatment of Chronic Diseases at Spas, Particularly with Reference to Modern Conception of Radium Emanation. G. A. Persson, Mount Clemens, Mich.
132 *Causes of Pain in Upper Right Quadrant of Abdomen as Determined by Means of Roentgen Rays. G. E. Pfahler, Philadelphia.
133 Catching Cold. W. Brady, Elmira, N. Y.

132. Pain Explained by Roentgen-Rays.—Pfahler summarizes his paper as follows: 1. Practically all pathologic conditions in the chest which may cause pain in the right upper quadrant of the abdomen can be demonstrated by the Roentgen-rays.

2. Subdiaphragmatic abscess can usually be demonstrated.

3. Biliary calculi can be shown in some cases.

4. Duodenal, gastric and colonic adhesions can practically always be demonstrated by their effects on the position and movements of these organs.

5. Gastric ulcer can be shown only when it has perforated, and can be suspected by spasmodic contractions, which may be present in the stomach.

6. Duodenal ulcer may be suspected if spasmodic constrictions are present in the duodenum.

7. Gastric carcinoma, Pfahler believes can be almost always demonstrated.

8. Renal calculus can be demonstrated in at least 98 per cent. with good technic.

9. Renal abscess can often be demonstrated by combined cystoscopic and roentgenoscopic examinations.

10. Perinephric abscess can be demonstrated when it is large enough to produce a palpable tumor, or when it displaces neighboring organs.

11. Colonic kinks and constrictions can be demonstrated.

12. Each of the foregoing conditions requires careful technic and careful study in the sequence of the various steps during the examination, and usually requires not only a fluoroscopic examination, but a number of plates.

Journal of Arkansas Medical Society, Little Rock

March, VIII, No. 10, pp. 263-284

134 Etiology and Pathology of Cholelithiasis. S. Cooper, Fort Smith.
135 Symptomatology and Diagnosis of Cholecystitis. A. E. Sweatland, Little Rock.
136 Treatment of Trachoma. H. Moulton, Fort Smith.
137 Postoperative Ileus: Case Relieved by Intestinal Puncture. L. Long, McAlester, Okla.
138 Etiology and Treatment of Clinical Manifestations Resulting from Cervical Anteflexions. C. S. Holt, Fort Smith.

April, VIII, No. 11, pp. 285-316

139 Infection of Urinary Tract by Bacillus Coli. S. Cooper, Fort Smith.
140 Cancer of Uterus and Importance of Making Early Diagnosis. E. E. Barlow, Dermott.
141 Conservation of Ovaries. W. Crutcher, Pine Bluff.

FOREIGN

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

British Medical Journal, London

May 4, I, No. 2679, pp. 989-1052

1 Chronic Intestinal Stasis. W. A. Lane.
2 *Infection of Urinary Tract by Bacillus Coli. L. G. J. Mackey.
3 *Correlation and Distinction Between Certain Symptoms in Some Abdominal Diseases. E. S. Bishop.
4 *Appendicitis and Quickness. E. Owen.
5 *Retroperitoneal Perforation of Duodenum. E. D. Telford and S. B. Radley.
6 Mechanism and Treatment of Shock. H. T. Gray and L. Parsons.

2. Infection of Urinary Tract by B. Coli.—In severe and obstinate cases Mackey advises that an experienced urinary surgeon should be consulted, and it should be his object to determine whether the infection is in the bladder or kidney, or both; whether it is limited to one kidney or present in both; whether it is a primary infection or secondary to stone, tubercle, or obvious obstruction. How far the surgeon is able to remedy a moderate dilatation of the kidney pelvis Mackey does not know; but where the infection is obstinate and associated with nephroptosis, he believes nephropexy should be tried. If the surgeon discovers no indication for operative interference, there is in vaccine treatment a remedy which will always relieve, and sometimes cure, the disease; and in some cases a course of vaccine might with advantage be used as a preliminary to operation. In mild infections without symptoms the condition will often remain undiscovered, but once the infection is known to exist, it must be borne in mind that the disease may at any time become more acute or spread to another part of the urinary tract, so that even if a case does not appear to call for treatment, the condition should never be altogether ignored. Although infection of the urinary tract by *B. coli* is of common occurrence, the symptoms will often fail to draw attention to the urinary organs; and the physician will certainly fall into the error of his predecessors of attributing the symptoms to other causes, unless he is prepared to adopt the simple measures necessary to make a correct diagnosis.

3. Symptoms in Some Abdominal Diseases.—It would appear from Bishop's observations that cases of appendicitis must be reclassed as: (1) Acute, (2) relapsing or subacute, and (3) chronic, in which latter class all these cases under consideration must be included. It is in this class that difficulty is found as to diagnosis before operation, difficulty which it is very necessary to overcome and which Bishop suggests may be cleared up by a more careful search among the records of the earlier attacks and comparison with those of the later ones. Such search should be directed to (1) any difference as to the localization of the pain; (2) any alteration in the relationship of pain and vomiting; (3) the relief afforded or not by vomiting; (4) the effect of purgatives.

4. Appendicitis and Quickness.—The word quickness is used by Owen in a double sense: first, with regard to the speed in which appendicitis may run its course, and, second, with regard to the need of the surgeon losing no time in getting to work when once the presence of the disease is recognized, or, on good grounds, suspected. The more he sees of appendicitis the more convinced he is that the greatest safety lies in the quickness with which the radical operation is undertaken.

5. Retroperitoneal Perforation of Duodenum.—A case is cited by the authors which had a fatal termination, but in which they were able to show that a duodenal ulcer which had perforated in the retroperitoneal area of the second stage could be reached with ease and closed by sutures. Under "open" ether anesthesia the abdomen was opened by a long incision through the right rectus; the peritoneal cavity was normal and no ulcer was seen on the anterior surface of the duodenum. A large gauze packing was inserted, and with good retraction it was a quite easy matter to expose the second portion of the duodenum. A vertical incision was made through the peritoneum immediately to the outer side of and parallel to the descending portion of the gut. There escaped at once a large quantity of fluid of the same nature as that obtained from the drainage tube. The duodenum thus "mobilized" was quite easily turned forward and to the left, when the perforation was at once apparent. The opening was in the center of the posterior wall of the descending portion 1 in. from its beginning. The perforation admitted the tip of the index finger and there was hardly any induration of its edges. It was an easy matter to close it by four Lembert sutures, and in fact it was closed more readily than is possible in many cases of intraperitoneal perforation. A posterior gastro-enterostomy was quickly done and the pylorus closed by a ligature. The whole operation occupied less than half an hour. After the operation there was a distinct rally, probably due to the ether, but during the afternoon the signs of collapse were apparent, and the patient died at noon of the following day.

V. 58
1912

Journal of Obstetrics and Gynecology of British Empire, London

March, XXI, No. 3, pp. 189-192

7 Classification in Gynecology. W. E. Fothergill.
8 Cause and Treatment of Procidentia Uteri as It Occurs in Parous Woman. E. H. Tweedy.
9 Combined Pregnancy. R. H. Lucy.
10 Solid Teratoma of Ovary in Which Patient Is Free from Recurrence Six Years After Operation and Bore Child Three Years After Removal of Tumor. H. Williamson.
11 Prolapse and Pregnancy: Vaginal Suspension. B. Solomons.
12 Treatment of Acute Puerperal Inversion of Uterus. M. H. Phillips.
13 Concealed Accidental Hemorrhage Treated by Cesarean Section and Hysterectomy. M. H. Phillips.
14 Curious Instance of Vicarious Menstruation. D. M. Greig and J. A. Kynoch.
15 Primary Mesothelioma of Fallopian Tube. C. Eglington.

Lancet, London

May 4, I, No. 4627, pp. 1175-1252

16 *Cardiac Debility and Cardiac Dilatation. G. A. Gibson.
17 Cellular Activity in Health and Disease. E. E. Goldmann.
18 Case of Ligneous Thyroiditis. G. R. Murray and F. A. Southam.
19 Treatment of Muscular and Joint Injuries by Graduated Contraction. M. Smart and W. R. Bristow.
20 Spa Treatment of Neuritis. W. Armstrong.
21 Temperatures of One Thousand Children. M. H. Williams.
22 Family Susceptibility and Virulence in Scarlet Fever. G. S. Banks.
23 Organization of Antituberculosis Crusade. R. A. Lyster.

16. Cardiac Debility and Cardiac Dilatation.—In the management of milder cases of weakness, with little or no dilatation, Gibson says regulation of rest and diet, as well as attention to digestion and elimination, will suffice to bring about recovery. Even in such instances the employment of some cardiac tonic is helpful as a means of accelerating improvement. Long experience has convinced him that, for this purpose, small doses of digitalis are beyond question most useful. If not causing gastric or enteric irritation the tincture is best and the dose should not exceed 5 minims twice a day.

The remedy may be combined with nux vomica, if it seems advisable to do so. In graver cases absolute rest and general massage, with careful diet and free elimination, must be employed, as well as larger doses of digitalis and strophanthus. If the arterial pressure is high, it will suggest the employment of the nitrites; if the liver is enlarged the use of mercury, along with digitalis, will be indicated; if the renal secretion is scanty the addition of citrate of caffein and of citrate of potassium will be helpful.

Edinburgh Medical Journal

May, VIII, No. 5, pp. 386-480

24 Local Specific Treatment of Infections, with Special Reference to Epidemic Meningitis. S. Flexner, New York.
25 Nocturnal Urination. A. G. Miller.
26 Treatment of Contraction of Pelvic Outlet: Two Cases, One Treated by Pubiotomy, the Other by Induction. J. Young.
27 Trauma as Factor in Disease. A. James.
28 *Methods of Examining and Enumerating Blood-Plates. H. S. Reid.
29 Multiple Osteomata with Supervening Sarcoma. D. M. Greig.
30 Reinfection with Syphilis. J. M. Graham.

28. Methods of Examining Blood-Plates.—A comparison of the various methods of enumerating blood-plates has been made by Reid. The simplest and most accurate method he says is to puncture the skin through a drop of a diluting fluid, transfer some of the mixture to a slide, dilute further, if necessary, on the slide. With the aid of a "Retz" eyepiece ascertain the proportion of plates to red blood-corpuscles, the latter being previously or subsequently counted. The best available diluting fluids are those of Pratt, Kemp, van Emden. Pratt's solution is greatly improved by the addition of sufficient methyl green to tint it fairly deeply. The number of plates per c.m. in a normal adult may vary from two to four or five hundred thousand, the average count being about 300,000. Fragmentation of the plates may account to some extent for differences in the results of emumeration of plates.

Medical Press and Circular, London

April 17, XCIII, No. 3806, pp. 393-420

31 Diseases of Hypophysis Cerebri in Relation to Acromegaly. H. C. Thomson.
32 Shreds in Clear Urines. L. G. Gunn.
33 Cancer of Cervix. S. J. Cameron.
34 What We Know To-Day About Trypanosomiasis. F. M. Sandwith.

April 24, XCIII, No. 3807, pp. 421-446

35 Examination of Sputum. V. H. W. Wingrave.
36 Present Position of Surgery of Malignant Tumors. C. A. Morton.
37 *New Blood-Counting Pipette for Estimating Number of Leukocytes and Blood Parasites Per Cubic Millimeter. D. Thomson.
38 Tubercle Bacillus and Initial Hemorrhages of Pulmonary Tuberculosis. F. Bezançon and M. P. Weil.

May 1, XCIII, No. 3808, pp. 447-474

39 Pruritus Vulvæ: Its Etiology and Treatment. R. A. Gibbons.
40 Few Therapeutic Points. H. French.
41 Subcutaneous Injection of Oxygen: Indications, Technic and Results. D. Derose.
42 Want of School Dentistry. G. Sheppard.

37. Blood-Counting Pipette.—Thomson's pipette is about 5 inches long and is made of glass tubing similar to that used for thermometers, with a white opal background and powerful magnifying surface. The capillary bore, however, is not flattened out like that of a thermometer but is more nearly circular in cross section. The bore is exceedingly fine and hair-like, such that a portion of the capillary about 60 to 70 millimeters long has a capacity of 1 cubic millimeter. This cubic millimeter length is graduated into equal parts, so that a given fraction of a cubic millimeter of blood can be accurately blown out. A rubber tube with a glass mouthpiece is attached to one end of the pipette, and the other end tapers to a very fine point, which is necessary for expelling accurate small droplets of blood.

Method of using the pipette: (1) Prick the ear or finger and allow a tiny droplet of blood to exude. Do not squeeze (or only very little), as squeezing drives out lymph and lymphocytes from the lymphatics. (2) Suck the blood into the pipette. (3) Expel the blood until the column coincides with a line on the magnifying surface. Wipe the point of the pipette and expel one-eighth or one-fourth c.m. of blood on to a clean glass slide. After this has been carefully done, expel all the blood immediately from the pipette, otherwise it will clot in the bore. (4) Breathe on the measured droplet of blood on the slide, and spread it by means of the point of the pricking needle into a small square, about 4 mm. by 4 mm. This square should be spread as uniformly and as neatly as possible. (5) Allow the little square blood-film to dry in air. Fix for about two minutes in absolute alcohol and stain with the usual blood-stains. Wash gently and dry on blotting paper. (6) If it is desired to enumerate asexual malaria parasites, the square film should be spread over a smaller area into a thicker film and fixed in acid alcohol (5 per cent. dilute acetic acid in absolute alcohol) before staining. (7) The pipette should be cleaned and dried immediately after use. This is done by sucking up water and expelling it alternately several times. Repeat this process with absolute alcohol or ether and, finally suck air through to dry the bore.

Glasgow Medical Journal

May, LXXVII, No. 5, pp. 321-399

43 Problem of Feeble-Minded. J. Macpherson.
44 Analysis of 100 Consecutive Cases of Stricture of Esophagus. W. Downie.
45 Syphilis and Deafness. J. K. Love.

Bulletin de l'Académie de Médecine, Paris

April 16, LXXVI, No. 16, pp. 307-317

46 *Curable Forms of Permanent Arterial Hypertension. C. Flessinger.

April 23, No. 17, pp. 319-338

47 *Ecchymosis as Sign of Fracture of Humerus. (De l'ecchymose transversale au pli du coude comme signe de fracture de l'extrémité inférieure de l'humérus.) E. Kirmisson.
48 Ultimate Results of Experimental Hypophysectomy. (Etude des synergies hypophyso-glandulaires. Les résultats de l'hypophysectomie subtotale avec survie prolongée.) C. Livon and M. Peyron.

46. Permanent Arterial Hypertension.—Flessinger refers to the abnormally high blood-pressure liable to accompany obesity and aasystole and which subsides as the cause is removed. Even when the blood-pressure is continuously high, the patients can live in comfort for years if they avoid imprudences which open the gate to cerebral accidents or render the kidney insufficient. When with a permanently high blood-pressure some imprudence sends it up still higher, dieting and rest will tide the patient along to safe ground again. As a rule, he says, physicians are too apt to mistake the effect for the cause in these cases. Among 160 patients with permanently high arterial pressure he found that eighty-four had interstitial nephritis, forty-four arteriosclerosis without kid-

ney disease, and thirty were obese but free from kidney and aortic disease and two had asystole, that is, the left ventricle failed to contract normally. Under the influence of a hearty meal, an emotion, a long railroad journey or fatigue of any kind, transient crises of hypertension are liable to occur but they subside under strict hygienic measures, a milk and vegetable diet and bed rest. No other measures are effectual, and if electricity, etc., are used they only divert the patients from the above indispensable restrictions. Many mishaps have resulted from the foolish attempts to substitute other measures for the strict dieting and bed rest which alone are liable to tide the patients past the danger point. Digitalis may be needed as an adjuvant, especially in the asystolic.

47. Summarized in the Paris Letter in THE JOURNAL, May 11, p. 1457.

Presse Médicale, Paris

April 27, XX, No. 34, pp. 345-356

49 Technic, Apparatus and Findings in Operations on the Lungs. (Traitement chirurgical des maladies du poumon.) H. Hartmann.

May 1, No. 36, pp. 357-392

50 Joint Disease Due Directly or Indirectly to the Tubercle Bacillus. (Démonstration et pathogénie des arthropathies bacillaires séreuses et congestives.) L. Landouzy, H. Gougerot and H. Salin.

Journal de Médecine de Bordeaux

April 21, XXIV, No. 16, pp. 241-256

51 *Typhoid Process in the Elbow. (Fièvre typhoïde et adénite épitrochléenne.) L. Verdelet.

51. **Typhoid Adenitis.**—In the first of Verdelet's two cases staphylococci were found in the pus evacuated from a suppurative process in the epitrochlear lymph-node in the elbow of a young child convalescing from typhoid. A small wound of the thumb was probably the entering point of the pyogenic germs. In the second case the epitrochlear lymphadenitis subsided without suppuration under systematic application of wet compresses. The patient was a child of 9, convalescing from a relapse of typhoid fever. In this case the elbow process was probably a primary typhoid lesion.

Lyon Médical, Lyons

April 21, XLIV, No. 16, pp. 873-916

52 *Artificial Premature Delivery in Two Diabetics. (Accouchement provoqué thérapeutique chez des diabétiques.) Voron and L. Follet.

52. **Pregnancy in Diabetics.**—It frequently happens that the diabetes becomes aggravated during a pregnancy, or there is a history of mishaps during previous pregnancies, and it may be advisable to bring on a premature delivery at eight and a half months in the interests of both mother and child. Another reason for this is that the fetus in a diabetic woman is liable to grow unusually large. If it is found to be increasing rapidly in size, this is another argument for the premature delivery. Another reason is that the mother's diabetes seems to affect the fetus especially during the last few weeks, so that the infant has better chances of survival safely sheltered in an incubator than left in the uterus under the influence of the diabetes poison. In two cases reported the induced delivery passed off favorably for the mothers but both infants seemed apathetic and breathed with more and more difficulty, becoming cyanotic and dying five and thirty-six hours after birth. The adrenals were abnormally large in both, but otherwise the organs were apparently normal. One child had an unusual development of fat around the viscera, and it weighed over 4,000 gm.

Revue de Gynécologie, Paris

March, XVIII, No. 3, pp. 257-352

53 *Vater-Paccini Corpuscles in Fallopian Tube. P. Corylios.
54 *Horseshoe Kidney. I. (Le rein en fer à cheval. Etude anatomique, pathologique et chirurgicale.) F. Legueu and E. Papin.
55 Urethrovesicovaginal Fistula. G. Luys.

53. **Vater-Paccini Corpuscles in Fallopian Tubes.**—Corylios says that only one case of this occurrence is on record, that published by Ries of Chicago, but he has encountered a second case, of which he gives an illustrated description, with discussion of the origin and negative physiologic rôle of these corpuscles.

54. **Horseshoe Kidney.**—Legueu and Papin remark that the progress in diagnostic technic has demonstrated that horseshoe kidney is more common than previously supposed. They think the time has come for an exhaustive study of this anomaly, and here present the first report of their work in this line, based on study of 300 cases. Some of them were personally observed and a number of others have never been published before. Twenty-four illustrations accompanying the article show the wide divergence in shape and other features of horseshoe kidneys. The earliest case on record was published in 1522.

Revue Médicale de la Suisse Romande, Geneva

March, XXXII, No. 3, pp. 205-280

56 *Dangers and Advantages of Salvarsan. H. Oltramare.
57 *Psychotherapy in General Practice. Its Sphere of Action and Its Limitations. E. Thomas.
58 Therapeutic Pneumothorax for Pulmonary Tuberculosis. Sillig.
59 Intradermal Tuberculin Reaction in Children. (La réaction de Mantoux en clinique infantile.) Combe.

56. **Salvarsan in Syphilis.**—Oltramare remarks that in these days of *reportage intensif* everything is seized on for news, and the physician's task is rendered more difficult by the delirium of the public when a therapeutic possibility is heralded abroad as a certainty, and then, during the period of reaction, when the public fears and discredits the new remedy. From his own experience and the literature, Oltramare concludes in favor of a single intravenous injection of salvarsan in the dose of 0.01 gm. per kilo of body weight, never surpassing a total of 0.6 gm. With this single injection, during the first stage of syphilis, before any secondary manifestations have appeared, he thinks we can count on warding off the secondary manifestations in 85 per cent. of the cases, and thus trust that we have aborted the disease. Diligent search of the literature, he says, has failed to reveal more than one fatality (Queyrat) after a single injection in the primary phase. He does not believe in the advisability of repeating the injection. The indications are different in the secondary stage, and opinions differ widely as to the best technic. It is foolish, he thinks, to base treatment on the Wassermann reaction, as this may prove a false guide. He has witnessed roseola develop while the Wassermann reaction was negative.

57. **Psychotherapy in General Practice.**—Thomas argues that psychotherapy can be effectually applied not only in neuroses and psychoneuroses but in a number of morbid conditions connected with various organs as well as with the nervous system. Patients liable to benefit by psychotherapy are those who complain of symptoms which are out of proportion with the objective findings; especially is this the case with gastrointestinal disturbances. Further, the persons who are fatigued and easily become exhausted, who find that they forget their malaise and exhaustion in pleasant company. Further, persons who worry and dread, who are afraid they will not sleep and consequently do not. The self-centered, the constitutional neuropaths—these are especially amenable to psychotherapy. Some slight actual or imagined organic trouble maintains the neuropathy. The physician must call on the forces which seem to him the most developed. He must strike on the vulnerable point not to elicit pain but to induce a favorable reaction. Many a patient when spoken to in this manner rouses as from a nightmare and skilful psychotherapy will soon restore conditions to normal. Patience and time are necessary for it, and it should be supplemented by the proper diet and drugs with stomach and cardiovascular disturbances. But Thomas warns never to use drugs to cure insomnia; they act only by depressing the nervous system. Hypnosis and direct suggestion are also tabooed. All agree that suggestion should be by indirect persuasion. He declares that if the general practitioner will once become convinced of the value of psychotherapy, the old and regretted type of family physician will rise once more from its ashes. Among the special affections most liable to be influenced by psychotherapy he mentions mucomembranous enteritis, the disturbances persisting after appendicectomy, cardiovascular disturbances, incipient arteriosclerosis which at first is merely a lack of balance between the action of the vasoconstrictor and vasodilator nerves, exophthalmic goiter and sexual pathology.

V. 58
1912

Semaine Médicale, Paris

April 24, XXXII, No. 17, pp. 193-204

60 Pathogenesis of Albuminuric Retinitis. (Pathogenie des rétinites albuminuriques.) A. Chauffard.

Archiv für klinische Chirurgie, Berlin

XCVII, No. 4, pp. 831-1075. Last indexed April 27, p. 1318

61 *Disadvantages of Silver Wire as Suture Material. (Verwendung des Silberdrahtes in der Chirurgie.) O. v. Frisch.
62 *Perineal Prostatectomy with Lateral Incision. (Prostatektomie nach Wilms.) A. Stieda.
63 *Site of Traumatic Injuries of the Spine. (Die Prädilectionsstellen der Indirecten Verletzungen und der chronischen traumatischen Erkrankungen der Halswirbelsäule.) F. Orsos.
64 *Volvulus of the Small Intestine. (Weitere Beiträge zur Casuistik und Aetiologie des Dünndarm-Volvulus.) W. Philipowicz.
65 Dangers of Almatein Filling for Bone Cavities. (Experimentelle und klinische Untersuchungen über die Almateinknochenplombe.) M. Lawrowa.
66 Chromaffin Tumor in Adrenal; Two Cases. (Zur Lehre der Paragangliome der Nebenniere.) M. Herde.
67 Roentgenoscopy of Congenital Hernia of the Diaphragm. (Die congenitale Hernia diaphragmatica im Foramen Morgagni und ihre Röntgendiagnose.) E. Waelli.
68 *Appendicitis and Dysmenorrhea. D. Rona.
69 Participation of Prostate in Micturition. (Bedeutung der Prostata beim Harnlassen und Mechanismus der prostatischen Harnbeschwerden.) A. Lendorf.
70 *Rupture of Hydronephrosis and Pseudohydronephrosis. P. Babitzki.
71 *Torsion of Sigmoid Flexure. (Zur Frage der radicalen Behandlung und Verhütung von Recidiven bei Achsendrehungen des S. romanum.) I. I. Grekow.
72 Varicose Tumors of the Arm. (Genuine Phlebektasie des Armes.) E. Bircher.
73 *Surgery of the Heart. (Conservative oder radicale Herzchirurgie? Ein Beitrag zur Herznaht.) E. Bircher.
74 Ileus from Diverticulum. (Eigenartiger Fall von Divertikelileus.) E. Höpfner.

61. **Silver Wire as Suture Material.**—Frisch has found that silver wire is liable to rust away or break at points where it is bent, and he reports a case in which eighteen years after an operation for umbilical hernia, the sharp points resulting from broken wire caused serious irritation in the abdominal cavity, culminating in an acute ileus, but after clearing out all traces of the wire suture, the patient, a woman of 56, has been free from disturbances since. The wire points had not caused any subjective trouble. This same absence of subjective disturbances was noted in a case of von Eiselsberg's of injury from broken gold wire suture material.

62. **Perineal Prostatectomy.**—Stieda has applied Wilms' technic in five cases, the incision being lateral, parallel to the left ascending ramus of the pubis, about 4 or 5 cm. long. The operation was successful in all but one case in which the trouble proved to be malignant disease and the patient had also hydronephrosis. He operated under spinal anesthesia in each case. There has been no tendency to incontinence since in any instance. The men were between 66 and 74 and the whole operation took only ten or fifteen minutes at most, and healing was complete in from eleven to forty-six days without further disturbance in micturition. The enlarged left and central lobes were easily removed. The effectual drainage and slight hemorrhage with this technic and its rapidity of execution are the main advantages.

63. **Trauma of the Spine.**—Orsos has been studying on the cadaver the points that suffer most in case of trauma affecting the spine. These points are liable to be particularly fragile and later yield anew to comparatively slight trauma, the findings in such cases being often puzzling from the medicolegal standpoint.

64. **Volvulus of the Small Intestine.**—Of the 232 cases of internal occlusion of the intestines at the Czernowitz hospital, torsion of the small intestine was responsible for the disturbances in fifty-three; that is, in 23 per cent. In seven recent cases the small intestine was kinked as well as twisted around its own axis; in the others, around the axis of the mesentery. In sixteen cases the outcome was fatal.

68. **Appendicitis and Dysmenorrhea.**—Rona relates a number of cases in which an unsuspected chronic appendicitis caused symptoms during the congestion of menstruation but which were interpreted as ordinary dysmenorrhea. After removal of the inflamed appendix, the dysmenorrhea ceased permanently. One patient was an unmarried woman of 38 who had been treated for her dysmenorrhea in various ways without effect, dilatation of the os, slitting the cervix, radiotherapy, etc., with brief or no benefit. The restrospective diagnosis then showed a typical acute appendicitis two years before—not recognized at the time—with exacerbation at each menstruation of the chronic lesions left. All her dysmenorrhea ceased after removal of the appendix. Rona has had the same experience in two other cases. In another a girl of 17 had acute appendicitis coinciding with the onset of dysmenorrheic menstruation, but the attending physician assumed merely hysteria or possibly a secret abortion, and six days were thus lost before an appendicectomy was considered, but the patient was then moribund. Lenhartz has reported a similar case in a girl of 19, the delay in differentiation here also proving fatal.

70. **Rupture of Hydronephrosis.**—Babitzki has found twenty cases on record in which a hydronephrosis ruptured and the resulting retroperitoneal cyst was taken for true hydronephrosis, the result being a blunder in operating, the surgeon opening the abdomen from the front and having to go through the peritoneum or make another incision in the rear. The rapid growth of the tumor is not characteristic of true hydronephrosis. He reports three cases and tabulates those he has compiled. Mistakes in diagnosis are almost inevitable where the escaping fluid does not become encapsulated; the symptoms in this case are liable to simulate peritonitis.

71. **Treatment of Torsion of Sigmoid Flexure.**—Grekow reports two cases in which the torsion recurred a year or so after a supposedly radical operation. These discouraging results compel some more effectual operation than those currently in vogue, and he suggests a technic which he has found effectual when the flexure has been torn from its mesentery. After untwisting the loop, he introduces through the rectum or through an incision in the intestine, a tube to permit evacuation of the contents of the loop. Then forceps are passed by an assistant up through the rectum and the mucosa of the loop of the flexure, at its highest point, is seized in the forceps and is drawn down and out, turning the loop thus inside out like the finger of a glove. The loop is drawn out until the upper end of the flexure joins the upper end of the rectum. The part protruding from the anus is then cut off and a big, partially flexible, drain tube is introduced into the loop around which the loop is tied and the outer end is fastened to prevent its slipping out. The tube and the segment of the loop inside the rectum drop off before long. Pressure gangrene is prevented by repeated enemas and frequent changes of position. The operation is as effectual as resection of the loop, while it is far easier and simpler.

73. **Treatment of Wounds of the Heart.**—Bircher reports a case of serious gunshot injury of the heart which healed under conservative measures alone. In another case, multiple stab-wounds of the heart required operative treatment but one of the stab-holes in the pericardium was overlooked and a second operation had to be done twelve hours after the first. The young man recovered. Bircher extols the peculiar advantages and valuable assistance of the positive pressure apparatus in this case. The heart bore the two sutures well although the interval between had been twelve hours. The second operation showed the prompt repair already under way of the wound first sutured. Bircher's experience has convinced him that it is well to drain, as in this case, leaving a drain at both ends of the incision. Conservative measures seem more promising for gunshot wounds.

Archiv für Verdauungs-Krankheiten, Berlin

March, XVIII, No. 2, pp. 121-272

75 Tests for Pancreas Functioning. (Wert der Methoden zur funktionellen Pankreasdiagnostik.) F. Frank.
76 Serodiagnosis of Cancer in Gastro-Intestinal Tract. (Ueber die Frühdiagnose der Krebse des Verdauungskanales mit bes. Berücksichtigung der serologischen Methoden.) G. Kelling.
77 Laxative Action of Bile Acids. (Die abführende Wirkung der Gallensäuren.) G. Singer and K. Glaessner.
78 *Lack of Saliva Secretion. (Ueber Xerostomie.) H. Curschmann.
79 *Improved Test for Occult Blood. (Neues Verfahren zum Nachweise von Blut.) Z. Inouye and T. Yastomi.

78. **Xerostoma.**—This term was coined by Hadden to express dryness of the mouth from deficient secretion of saliva. It is common in old women, according to Curschmann's experience,

but he has never noted it in aged men. Possibly liquor and tobacco in men have a stimulating action on the buccal mucosa while the very hot tea and coffee of which old women are fond may be a causal factor in the atrophy of the mucosa. Entirely different from this form of xerostoma is that developing on a nervous basis in younger persons. Kraus has reported the case of a widow during whose early widowhood the salivary glands ceased to secrete. She could not swallow her food unless with a sip of water. There were no organic changes in the salivary apparatus. Curschmann has encountered a similar case in a man of 29 in a responsible official position. The dryness of the mouth was first noticed at the age of 10, and it seriously interferes with speaking and facial expression, but during mastication and swallowing saliva is secreted in adequate amounts. The patient had no inherited nervous taint, but he has gradually developed neurasthenia of a sexual and vasomotor character. There are no signs of atrophy or lesions in the mucosa or salivary apparatus. Curschmann prescribed pilocarpin to stimulate the secretion, but no benefit was apparent until the dosage was increased to 0.25 gm. pilocarpin in thirty pills, three or four being taken during the day. The effect of the pilocarpin becomes manifest in thirty or forty-five minutes. The knowledge that he has an efficient remedy with him has restored the patient's confidence so that he has lost the phobia which had been aggravating the trouble. He still takes three pills a day with an extra one half an hour before any occasion for much speaking, and a complete cure of the xerostoma is in sight.

79. **Improved Test for Occult Blood.**—Inouye and Yastomi state that the technic described is more sensitive than any other method to date while it can be applied after the Kossa, van Deen or Weber tests have been applied. The transient character of the color reaction is the main drawback. The test is made by mixing 10 c.c. of the fluid to be examined for occult blood with 10 c.c. of 90 per cent. alcohol and 5 c.c. of chloroform. After lightly shaking, add from 10 to 20 drops of freshly made 5 per cent. tincture of guaiac and of ozonized turpentine. In the presence of blood the layer of chloroform or the entire fluid turns a bluish violet in proportion to the amount of blood present. With this test, 0.00001 c.c. of blood can be detected in distilled water or urine, surpassing by 10 per cent. the most delicate of other tests. When an ethereal extract is used, the test is more sensitive if the fluid is first neutralized with an alkali to overcome the acidity of the ether. A special tube for preparing the ethereal extract is illustrated; it is merely a test tube with one or two openings on one side, plugged with rubber stoppers. This permits one layer of the fluid to be poured out without disturbing the other layers.

Berliner klinische Wochenschrift

April 22, XLIX, No. 17, pp. 773-824

80 Relations Between Arterial Blood-Pressure and Velocity of Current. (Beziehung zwischen Druck und Geschwindigkeit des Blutes im Arteriensystem.) K. Hürthle.
81 Thorium Treatment in Arthritis. (Ueber Mesothorium-, Thorium X- und Thoriumemanationstherapie.) A. Bickel.
82 Biologic Action of Mesothorium. (Biologische Wirkung der Thoriumemanation beim Menschen nach der Aufnahme derselben durch den Verdauungskanal. V.) K. Kojo. (Wirkung der Thoriumemanation auf Verdauungsfermente und Autolyse. VI.) Minami.
83 Actinium Therapy. (Ueber die percutane Anwendung radioaktiver Substanzen, speziell des Aktiniums.) A. E. Stein.
84 Disturbances in Bone Growth from Deformity of Periosteum and Cartilage. (Störungen in der periostalen und endochondralen Knochenbildung.) G. Joachimsthal.
85 Cultivation of Spirochaeta Pallida. E. Tomaszewski.
86 Negative Experiences with Antimeristem in Cancer. (Zur Antimeristemfrage.) K. Kolb.

Deutsche medizinische Wochenschrift, Berlin

April 25, XXXVIII, No. 17, pp. 785-832

87 *Duodenal Ulcers. (Duodenalgeschwüre.) C. A. Ewald.
88 *Improved Technic for Medical Electrodiagnosis and Treatment. (Zur Verbesserung der elektromedizinischen Diagnostik und Therapie.) R. Sommer.
89 The Quality of Proprietary and of Official Drugs. (Kollargol und Argentum colloidale.) E. Harnack.
90 Prophylactic Tuberculin Treatment in Experimental Tuberculosis of the Eyes. (Quantitativ-experimentelle Untersuchungen über die Wirksamkeit der Tuberkulintherapie—TA und BE—bei Augentuberkulose.) F. Krusius.
91 Cultivation of the Syphilis Spirochete. (Methode zur Reinzüchtung der Syphilisspirochäte.) H. Sowade.
92 *True Plethora. (Zur Frage der Plethora vera.) K. Hart.
93 *The Wassermann Reaction in the Cadaver. (Die Wa.R. am Leichenserum.) H. Schmidt.
94 Method of Radium Treatment of Upper Air Passages, Trachea and Esophagus. (Die Methodik der Radiumbestrahlung in der Nasen-Mund-Rachenhöhle, im Kehlkopf, in der Luftröhre und im Schlund.) G. L. Albanus.
95 Swellings in the Temporal Region. (Ueber Schwellungen am Schläfenbein.) A. Blumenthal.
96 *Participation of Ear, Nose and Throat in Constitutional Diseases. (Die Beteiligung des Ohres, der Nase und des Halses bei Stoffwechselkrankheiten.) G. Brühl. Commenced in No. 15.
97 *Chvostek's Sign in Older Children. (Bedeutung des Fazialisphänomens jenseits des Säuglingsalters.) H. Neumann.
98 Fever from Saline Infusion. (Zur Frage der Infusion physiologischer Kochsalzlösung.) A. Sippel.

87. **Duodenal Ulcer.**—Ewald remarks that a correct diagnosis is generally possible only when several of the alleged characteristic symptoms are present. He emphasizes in particular the periodicity of the pains, the vasomotor phenomena, the exclusive and repeated finding of blood in the stool, and pylorospasm. He thinks the "hunger pains" are less important for the diagnosis. It would be very instructive, he declares, if surgeons would publish their mistakes in diagnosis as well as the statistics of their operative cases. Ewald applies internal measures alone in recent cases but in the old ones he advocates immediate operation. In his experience with twelve cases, four patients were cured and three improved by medical measures alone. He adds that in looking over many reports of operations he is astonished at the few and vague symptoms on which frequently the operation was based.

88. **Improved Technic for Medical Electric Measures.**—Sommer reports that it is possible to do away with the disturbing influence of the resistance on the part of the skin in the application of galvanic electricity for diagnosis and treatment. He accomplishes this by interposing a device to supply a great resistance in the system, before connecting it with the body. The current that reaches the body after overcoming this resistance of 8,300 ohms passes through the skin with slight change.

92. **True Plethora.**—Hart has encountered true plethora in a number of young male cadavers, the blood-producing apparatus having been evidently functioning to excess.

93. **The Wassermann Reaction in the Cadaver.**—Schmidt examined 233 cadavers, his findings showing that syphilis in any form can be disclosed in the cadaver serum with 94 per cent. certainty. Comparative tests before and after death always harmonized.

96. **Participation of Ear, Throat and Nose in Constitutional Disease.**—Brühl discusses gout, obesity, myxedema and diabetes as affecting the ear, nose and throat, mentioning that Banting found his hearing improve after he had lost 35 pounds by his system of reducing weight. Persons with myxedema are often inclined to deafness and in many cases the hearing has improved with other symptoms of the disease under thyroid treatment. Brühl has observed a number of cases of the kind, confirming the close connection between the thyroid and the ear. Cretins with goiter are sometimes deaf mutes. Brühl has found great improvement in hearing follow thyroid treatment in cases of goiter and nervous deafness, while he has never witnessed any improvement under it in pure otosclerosis. One patient had myxedema and aplasia of the thyroid with typical nervous deafness and myxedematous swelling of the auditory meatus walls; the hearing became better and tinnitus less under thyroid treatment. The benefit from thyroid treatment must be due to the subsidence of myxedematous tissue in the ear passages and of toxic influences injuring the auditory nerve. With diabetes, the dryness of the auditory meatus walls may lead to itching and scratching, with infection and furuncles. Haug has called attention to a furuncle in the ear as possibly the first sign of diabetes, and Kipp has reported a case in which a furuncle in the outer ear in a diabetic child led to fatal coma within twelve hours notwithstanding its evacuation; no case of the kind in an adult is known. Brühl has, however, had fatal coma come on a few days after the onset of an otitis media in a man and woman of 50. The diabetes in these cases could not be controlled altogether by dieting and the acute otitis led to sudden acidosis, as is observed sometimes after general anesthesia or

V. 58
1912

other shock. In these cases no operation had been attempted. In very severe diabetes the otitis may rapidly lead to involvement of the mastoid process; he reports three cases of this kind. In case of mild diabetes an otitis media with profuse discharge from the ear following a coryza kept up for three months but Brühl finally cured it by four weeks of conservative measures. The necessity for abstaining from operations on diabetics prevails in regard to the ears as elsewhere; only when there is a vital indication is operative treatment indicated. The diabetes may be responsible for the chronic character assumed early by an acute process. In a recent instructive case a very old clinically latent suppuration in the middle ear suddenly flared up and perforated into the labyrinth. The syndrome was at first mistaken for ordinary influenza. A large cholesteatoma and a fistula into the horizontal semicircular canal were found at the urgent radical operation; but coma followed and the shock of the operation proved fatal. The ear process would have been inevitably fatal without the operation, so the chance was taken. Mastoid operations are followed by smooth healing as a rule if coma can be warded off, and he advises preparing the patient for the operation by dieting, large doses of sodium bicarbonate and a sedative, and preceding the general anesthesia with an injection of morphin or scopomorphin. In conclusion Brühl warns of the necessity for a systematic general examination in all cases of deafness due to the nerve itself, its explanation frequently being found in a general diathesis, diabetes, tendency to gout or other disturbance in the metabolism.

97. Chvostek's Symptom in Children.—Neumann found the active facial nerve spasm only in neuropathic children but it was almost constant in them after weaning. He cites the details of 180 children tested for Chvostek's symptom, and expatiates on its diagnostic importance as a valuable objective sign of the neuropathic constitution when there may be no other objective sign of its existence.

Deutsche Zeitschrift für Chirurgie, Leipsic

April, CCIV, No. 4, pp. 301-415

99 *Direct Sunlight in Treatment of Surgical Tuberculosis. (Zur Sonnenbehandlung bei chirurgischen Tuberkulosen.) F. de Quervain. (Einfluss der Sonnenbehandlung bei der Hochgebirgsbehandlung der chirurgischen Tuberkulosen.) J. Witmer. (Einfluss der Sonnenstrahlen auf tuberkulöse Sequester.) A. Franzoni.

100 *Incision of Common Bile Duct for Obstruction by Ascarides. (Choledochotomie wegen Spulwürmern.) J. Fertig.

99. Direct Sunlight Treatment of Surgical Tuberculosis.—Witmer and Franzoni report from Leysin, Switzerland, the experiences at Rollier's private sanatorium in the treatment of surgical tuberculosis. Their communications are preceded by an article from de Quervain describing the working out of the method of sunlight treatment during the nine years since Rollier first sought to apply it systematically. Witmer describes some typical cases of tuberculous processes in the shoulder, elbow, wrist, spine, pelvis, hip joint, knee and ankle, with other cases in which the long bones were involved, or the glands, peritoneum, urogenital apparatus, etc. He lists 546 cases of these various groups with only twenty-three out of the total in which no benefit was realized. It is evident, he declares, that such results as he reports will do much to restrict operative measures in extrapulmonary tuberculous processes. They should be applied only when it is positive that the focus is an isolated one and when it is certain that every trace of diseased tissue can be removed. Franzoni discusses in particular the influence of the heliotherapy on tuberculous processes with sequesters, giving detailed descriptions of five particularly severe cases, the outcome confirming, he states, that heliotherapy in sequester production with fistulas is the most ideal treatment known to date. The three communications fill 108 pages and are accompanied by fifty-six illustrations "before and after," but they do not describe the special technic for the exposures. (Rollier's work was mentioned recently in these columns, May 25, p. 1646.)

100. Obstruction of Bile Duct with Ascarides.—Fertig's patient was a woman of 32 who had complained for several years of recurring attacks suggesting gall-stones. More than once an ascaris had been found in the vomit but none was known to have passed in the stools. The patient had been treated for years for "stomach trouble" and chlorosis. Last January an unusually severe attack occurred with repeated vomiting for ten days, and two ascarides were found in the vomit. High fever and a chill accompanied the severe pain radiating from the stomach and liver region. Besides a few calculi, two ascarides were found in the gall-bladder and also six, 15 to 25 cm. long, were found in the common bile-duct and two more in the hepatic duct, all alive. Fertig reviews the similar cases on record, mostly necropsy findings. In Clemm's case all disturbances ceased after a single ascaris had been vomited.

Jahrbuch für Kinderheilkunde, Berlin

April, LXXV, No. 4, pp. 493-532

101 Necessity for Individualizing Intervals Between Breast Feeding During First Weeks of Life. (Zur Technik der Ernährung der Brustkinder in den ersten Lebenswochen.) H. Rietschel. To be continued.

102 *Modification of Tuberculin Reaction During Acute Infectious Diseases in Children. (Beobachtungen über v. Pirquets Tuberkulinreaktion bei akuten Infektionskrankheiten bei Kindern.) W. J. Moltschanoff.

103 *Later Development of Children with Inherited Syphilis. (Die weiteren Entwicklungs- und Gesundheitsverhältnisse der mit Lues congenita behafteten Kinder.) J. Vas.

104 *Thickness of Adipose Layer in Children. (Dicke des Fettpolsters bei Kindern.) H. Neumann.

102. Tuberculin Skin Reaction in Acute Infectious Diseases.—Moltschanoff applied the Pirquet technic to 150 children with various acute infections, including forty-two with measles and fifty each with scarlet fever and diphtheria. Although the tuberculin reaction had been positive before the acute infectious disease in a large number of the children, it became negative in 100 per cent. of the measles cases, in 85 per cent. of the scarlet-fever cases, but only in 12.5 per cent. of the diphtheria cases. The congestion and other changes in the skin readily explain the modifications in the response during the eruptive diseases.

103. After-History of Children with Inherited Syphilis.—Vas reports the later history of infants with inherited syphilis given treatment at the clinic for children's diseases at Budapest, in charge of Bokay. Among the 106,407 child patients that passed through the policlinic during the years 1905-1909, 720 had congenital syphilis. Vas classifies this material under various headings, with the results of reexamination in later years when such was possible. The children were all breast-fed but they did not gain in weight as much as the infants free from this inherited taint, and two-thirds of those reexamined had recurrences of syphilitic manifestations sooner or later. In a third there were signs of rachitis. Scarcely any of the children began to walk before the twelfth to eighteenth month. Ten per cent. of the children were known to have had convulsions later, but only one case of epilepsy was found. The mental development of the children was satisfactory but a third suffered from habitual headache, and the patients of many complained that the children were extraordinarily nervous and naughty, and enuresis was comparatively common.

104. Index for State of Nourishment.—Neumann takes up a fold of the abdominal wall on a line with the umbilicus but to the left of it, the fold parallel to the axis of the body, taking up the fold as deep as possible. The thickness of the fold is an index of the amount of adipose tissue and is thus an instructive index of the child's state of nourishment, especially when compared with the height and weight. The diameter of the base of the fold in boys between 3 and 13 and in girls between 4 and 7 averages 5 mm.; it increases in girls to 7 mm. between 8 and 13; to 11 mm. between 11 and 13, and to 13 mm. between 14 and 17. The children of the well-to-do frequently show much higher averages than the above.

Medizinische Klinik, Berlin

April 21, VIII, No. 16, pp. 625-678

105 *Bronchiolitis and Bronchopneumonia in Young Children. E. Feer.

106 Prophylaxis and Treatment of General Paralysis. (Bedingungen für die Entstehung der progressiven Paralyse.) A. Pilcz.

107 Chemical and Mechanical Factors in Pregnancy Predisposing to Cholelithiasis. (Bedeutung der Schwangerschaft für die Entstehung der Gallensteinkrankheit.) K. Grube.

108 Behavior of Bromin Salts in the Organism. (Zur Frage des Verhaltens der Bromsalze im Organismus.) W. Wolff and O. Opp.
109 Intravenous Salvarsan in Syphilis. E. E. H. Goldbach. Commenced in No. 15.
110 Diagnosis of Typhoid from Blood Findings. (Bedeutung der Verminderung des Fibrins, der mangelhaften Retractilität des Blutgerinnsels und der Abnahme der Blutplättchen in der Diagnose des Typhus abdominalis.) O. Stelger.

April 28, No. 17, pp. 679-722 and Supplement

111 Physical Measures in Cardiovascular Disease. (Die physikalische Behandlung der Herz- und Gefässkrankheiten.) L. Brieger.
112 Salvarsan in Scarlet Fever. (Ueber die Beeinflussung des Scharlaches durch intravenöse Salvarsaninjektionen.) R. Lenzmann.
113 *New Points of View in Treatment of Suspicious Intestinal Tumors. (Neue Gesichtspunkte in der Behandlung suspekter Darmtumoren.) A. Brosch.
114 Ethyl Chlorid for Blocking the Mandibular Nerve. (Ueber Leitungsanästhesie des Nervus mandibularis mittels Kälte —Chloräthyl.) A. Neumann-Kneucker.
115 Experimental Self-Fertilization. (Sexualia aus dem Tierreiche.) V. Franz.
116 Alcohol and Metabolism. (Die Beteiligung des Aethyl- und des Methylalkohols am tierischen Stoffwechsel und die Ursache der Giftigkeit des Methylalkohols.) W. Voltz.
117 *Vertigo. Its Pathology and Treatment. S. Laache.

105. **Bronchopneumonia in Young Children.**—Feer comments on the peculiar prevalence and dangers of bronchopneumonia in children under 2, especially when the child is inclined to rachitis or digestive disturbances. The younger the child the graver the prognosis, in contrast to croupous pneumonia which, he states, scarcely ever terminates fatally. Prophylaxis is particularly important, and there is hardly any other disease which can be warded off by proper hygiene so certainly as severe bronchiolitis and bronchopneumonia in young children. If whooping-cough and measles can be avoided until after the child is 3 years old and over, this is a great gain in the prophylaxis. He warns that pneumonia is unusually contagious for children with measles. The measles seems to enhance the susceptibility to diphtheria and tuberculosis and also for grippal affections and especially grippal pneumonia. Every person with influenza or even a mere "cold" should keep away from the young children in the family or institution. Feer insists on isolating away from young children every case of influenza in a hospital with as much care as the cases of measles and whooping-cough. Coryza in an infant should never be regarded lightly and if pneumonia develops the infant must be taken to a hospital unless it can be well tended at home. Two rooms should be given up to it, changing several times a day from one to the other, while one is being aired and heated and the air moistened by hanging up wet sheets or boiling water in the room. The child's position in bed with shoulders raised should be frequently changed. In mild cases a warm bath twice a day, rubbing the arms and legs well, is soothing; in the severer cases the bath water must be heated from 37 to 40 or 41 C. by pouring in more hot water, rubbing the limbs and keeping the child from six to ten minutes in the bath. The cough loosens up and the child sleeps quietly afterward. The hot bath draws the blood to the surface. Steam from boiling water generally serves to keep the cough loose, but if an expectorant is necessary he gives 10 drops three times a day of a mixture of equal parts of anisated solution of ammonia and fluid extract of senega aa 10 gm., given in sweetened water. Heart tonics are more often needed than expectorants, and he prefers for infants 5 gm. from three to five times a day of a 0.5 per cent. solution of caffein sodio-benzoate, doubling the dose for children of 2 to 4. Camphorated oil in subcutaneous injection can be given from two to six times a day at need. In severe cases some of these tonic measures should precede each bath or mustard pack. Other measures that may prove useful are inhalation of oxygen or atropin to relieve asthmatic bronchitis; potassium iodid, and, when rachitis impedes recovery, phosphorus-cod liver oil may aid the cure.

113. **New Points of View for Treatment of Cancer of the Intestines.**—Among the significant data recently recorded which open up new horizons, Brosch mentions (1) Stoeber and Wacker's successful experimental production with indol and skatol of atypical epithelial outgrowths which simulated cancer in every particular; (2) the demonstration of the lipoid-dissolving action of the substances used, and the deduction that chemical influences are factors in malignant disease. This harmonizes with the results of Loeb's research on experimental parthogenesis. (3) Greischer's demonstration that a defective local circulation favors atypical proliferation of epithelium, and hyperemia checks the growth of cancer. (4) The results of Werner's research showing that an alkaline medium has also an unfavorable action on cancer growth. (5) Theilhaber's demonstration that cicatricial tissue and chronic inflammation, the result of trauma and the processes of reproduction—all these have a tendency to favor the development of cancer. These facts explain why cancer in the intestine is almost invariably limited to the large intestine with its alkaline reaction and why it locates at points where the circulation is less active and the bends favor stagnation of feces. The metabolic processes and circulation become less active with age, explaining the prevalence of cancer in the elderly; waste products pile up in the organism. Analysis of old cases of bowel cancer has shown that there was always a history of digestive and local disturbances, some more or less chronic local derangement of the bowel functioning. This was particularly evident in the case of an army officer of 32. The cancer encircled a spot in the wall of the sigmoid flexure where an old pointed scrap of bone had lodged and stuck into the mucosa. Investigating the cases closer, one can almost invariably learn of some old bowel or digestive disturbance one, two to six years before. Brosch warns against oil enemas as the oleic acid split off keeps up an acid medium in the bowel. On the basis of the above conclusions, he treated a man of 42 suffering from an inoperable cancer at the sigmoid flexure, the diagnosis confirmed by palpation and roentgenoscopic findings and the patient's aspect. Treatment was begun to keep the diseased bowel at rest by daily enemas of water, applying local hyperemia to the region and keeping the segment of intestine involved bathed in an alkaline medium by giving a retention enema at night of a 5 or 10 per cent. solution of sodium bicarbonate. Last but not least, he aimed to promote the metabolism in general, to keep the bowels cleared out and thus prevent further decay and absorption in the intestine. These latter conditions were met by his method of "subaqual internal baths," cleansing and inducing local hyperemia. (The technic is not described.) Under a three months' course of measures to fulfil these four conditions, the regional lymphnodes subsided to normal size and the cancer shrank to a third of its former size. The patient is now in apparent clinical health and feels so well that he declines to have the contemplated operation performed.

117. **Vertigo and Seasickness.**—Laache says that the underlying cause of vertigo is generally in the eye or ear. Removal of a polyp or syringing out impacted cerumen in the ear often puts an end to the tormenting dizziness. In one case an officer suffered constantly from vertigo until the cause was traced to chemicals in the wall paper. In other cases the trouble was due to digestive disturbances, a tendency to overwork, to obesity, to undernourishment—each case requires individual treatment. Laache states that in the uncontrollable vomiting of pregnancy, the women are often able to retain a glass of milk if it is given to them warm, early in the morning, before they have lifted their head from the pillow and the milk is fed to them without their lifting their heads. Alcohol or quinin is often useful for vertigo, as also tonics. Laache has sometimes found valerian effectual, alone or combined with quinin. In conclusion he discusses seasickness, citing various methods of prophylaxis and treatment that have been proposed. The best of all, he says, is to go on board in a tranquil state of mind and with a rested body, after a light meal on shore with which a little wine was taken but scarcely any other fluids. Making close connection between the railroad and boat is unwise. The railroad traveling may predispose to seasickness. The bowels should be well evacuated before going on board, and the digestion generally should be in good order before undertaking a voyage. The cabin should be selected in the middle of the ship, near its transverse axis, the point where the rolling of the vessel is felt least. Reclining on deck in a sheltered place is useful for several reasons, one being the avoidance of seeing others in the throes of seasickness.

V. 58
1912

Monatsschrift für Kinderheilkunde, Leipsic

X, No. 12, pp. 649-682

118 Variations in the Amount of Breast Milk and Its Connection with the Fat Content. (Zur Physiologie der Milchsekretion. II.) H. Heibich.
119 Skin Reaction in Serum Sickness. (Zur Frage der Kutanreaktion.) F. Bauer.
120 Tuberculosis in Infants. (Zur Klinik der Säuglingstuberkulose.) Eichelberg.
121 *Advantages of Transverse Tracheotomy. (Vorteile des queren Luftröhrenschnittes bei Kindern und das Tracheotomieren auf liegender Intubationskanüle.) H. Keiner.
122 Serotherapy of Scarlet Fever. (Behandlung des Scharlachs mit Scharlachstreptokokkenserum.) X. Lewkowicz.

121. **Transverse Tracheotomy.**—Keiner lauds the superior advantages of a transverse incision over a tube in the throat as the routine technic for tracheotomy. The funtioning of the air passages is interfered with less than with a lengthwise incision, while it is safer and the scar left is much less apparent. He makes a practice of tracheotomizing in every case of descending membranous croup especially when it is complicated with measles. In one of the seven children he has treated by transverse tracheotomy, severe diphtheria had swollen the uvula until it had completely closed the entrance to the throat. After the transverse incision has healed, it forms merely an inward fold in the skin of the neck.

Münchener medizinische Wochenschrift

April 16, LIX, No. 16, pp. 849-904

123 Experimental Leprosy. (Durch Leprabazillen gesetzte Veränderungen beim Tiere.) H. Much.
124 *Operative Treatment of Post-Partum Hemorrhage. (Zur operativen Behandlung der Post-partum-Blutungen.) E. Kehrer.
125 Essential Elements of Pituitary Extract. (Das Pituitrin und seine wirksamen Bestandteile.) H. Fühner.
126 "Morphin-Free Pantopon." (Ueber morphinfreies Pantopon und die Wirkung der Nebenalkaloide des Opiums beim Menschen.) H. Winternitz.
127 Salvarsan in Rat-Bite Sickness. (Salvarsantherapie der Rattenbisskrankheit in Japan.) S. Hata.
128 *Operative Treatment of Typhoid Bacillus Carriers. (Zur Behandlung der Typhusbazillenträger.) A. Dehler.
129 *Differential Diagnosis of Bladder Calculus and Enlarged Prostate. (Prostatahypertrophie und Blasenstein.) P. Janssen.
130 Technic for Obtaining Large Amounts of Blood in Animal Experimentation. (Zur Technik der Gewinnung grösserer Blutmengen im Tierversuch.) A. Zahn.
131 *Differential Diagnosis and Treatment of Methyl-Alcohol Poisoning. R. Foerster.
132 Scleroderma. (Kasuistische und Therapeutisches zur Sklerodermie.) W. Kölle.
133 Management of Febrile Abortion. (Können wir bei der Behandlung des fieberhaften Aborts eine "bakteriologische Indikation" anerkennen?) A. Hamm.
134 Treatment of Anthrax. (Zur Behandlung des äusseren Milzbrandes.) E. Gräf.
135 Intraperitoneal Application of Camphorated Oil. (Zur Frage der intraperitonealen Kampferölanwendung.) O. Hoche.
136 Uremia an Acidosis. (Die Urämie eine Säurevergiftung?) C. Porges and A. Leimdörfer.
137 Roentgenoscopy of Gastric Spasm. (Röntgenologische Erfahrungen über Magenspasmen.) E. Stierlin. Commenced in No. 15.
138 *Non-Operative Treatment of Hemorrhoids. (Ueber die extraanale Behandlung der Hämorrhoiden.) S. Kofmann.

124. **Treatment of Post-Partum Hemorrhage.**—Kehrer emphasizes the fact that when the uterus is in a state of total atony it is absolutely refractory to all measures. If it responds to any measures it is merely in a hypotonic condition. In the latter, any vigorous oxytocic has an effectual action, but with total atony there is no use wasting time on any measures, not even packing the uterus with gauze, which merely stretches the flabby walls without stimulating them in the least to a contraction. The patient is doomed unless the blood-pressure drops so low that no more blood can be pumped into the uterine arteries, or unless the source of the hemorrhage is removed. He warns against the practice of saline infusion before the operation, as this merely aggravates the tendency to hemorrhage. The infusion should follow immediately after the source of the hemorrhage has been removed. He describes a technic which he thinks has a future in the treatment of dangerous post-partum hemorrhage from total atony. General anesthesia is scarcely necessary as the operation is so rapid and simple, and the patient's sensibility is deadened by the losses of blood. The pelvis is raised a little and the abdomen painted with iodin. The flabby uterus is then drawn out through a short longitudinal abdominal incision and the arteries in the isthmus are compressed by the assistant's fingers, while a stout double silk thread is passed from below upward through the fascia, parietal peritoneum near the lower end of the incision, the upper part of the wall of the cervix, then up through the parietal peritoneum and fascia near the upper end of the incision. This is done on both sides and the ligature thus includes the side wall of the cervix, the uterine vessels and the round and other ligaments, thus tying off at one stroke all the vessels reaching the internal genitals from each side. The whole procedure takes but three minutes. As soon as the source of the hemorrhage is thus shut off, salt solution is infused and the laparotomy wound then sutured. In the one case in which he had opportunity to apply this technic, the saline infusion had preceded the operation and this turned the scale against a favorable outcome.

128. **Operative Treatment of Typhoid Bacillus-Carriers.**—Dehler reported in 1907 his successful cholecystostomy on two chronic typhoid bacillus-carriers in the insane asylum in his charge. The women have been in good physical health since. The operation was followed by prolonged drainage and sterilizing local injections. It would have been more logical to remove the gall-bladder, he thinks, as the bacilli are probably confined to the bile apparatus and intestines in these carriers. Necropsy of one recently showed pure cultures of typhoid bacilli in the gall-bladder and bile ducts, with a few in the intestines, while the spleen and kidney were sterile. Since his last publication on the subject, Dehler has operated in two more cases of the kind. One patient was a woman of 64 with occasional diarrhea and typhoid bacilli in the stools. She developed suddenly acute empyema of the gall-bladder, which was drained for a time until it healed, and since then no more typhoid bacilli have been found. His fourth patient was a young woman with cholecystitis developing about a year after typhoid fever and typhoid bacilli were found anew in the stools. The bile passages were drained continuously for five weeks, since which time the patient has been in good health and apparently free from typhoid bacilli.

129. **Differential Diagnosis of Bladder Calculi and Enlarged Prostate.**—In the first case reported a man of 73 had been long in the care of a urologist taking treatment for the assumed hypertrophy of the prostate which his symptoms suggested. The prostate was slightly enlarged, the bladder too irritable to permit local examination. The patient was prepared for an operation on the prostate, but as he went under the anesthetic it was found possible to run a cannula into the bladder and an impact against a calculus was heard. Instead of the prostatectomy the bladder was opened and five calculi removed, curing the patient of all his previous symptoms. In another case of the kind some bladder calculi long escaped discovery and a partial prostatectomy was done without relief. Roentgenoscopy in these cases would have cleared up the diagnosis at once but it was not applied. Janssen discusses the symptoms, emphasizing their great similarity in both conditions. Even the localized pain with jarring and at the end of micturition, which is characteristic of vesical calculus, may be induced by secondary inflammation with simple hypertrophy of the prostate. The history of the case and subjective symptoms are thus of little use for differentiation and cystoscopy and roentgenoscopy are not always accessible. The main point in diagnosis is not the palpation findings in the prostate, but absolute exclusion of calculi; for this the bladder sound is most useful although small stones and those concealed in recesses may escape discovery by it, even when the pelvis is raised and lowered to mobilize the concrement. Röntgenoscopy alone permits the exact diagnosis, and Janssen urges that it should never be omitted in examining for the cause of a disturbance in micturition, regardless of whether the prostate is enlarged or not. Only when the *x*-ray excludes urolithiasis are we justified in ascribing the symptoms to the prostate alone. The bowels must be emptied for a day before the roentgenoscopy; in a recent case a roentgenogram showed an apparently unmistakable vesical calculus, but under a laxative the supposed calculus was expelled as a lump of feces. In another instructive case there had long been bladder disturbances but micturition had not been interfered with. A number of small calculi were discovered and removed, and

complete retention followed at once. The slightly enlarged prostate proved responsible and it was removed. It had a certain valve action, causing the retention; the weight of the calculi apparently had dragged on this part of the prostate, impeding the valvular action. As soon as the stones were removed, this valve began to act, closing the outlet completely. The connection between vesical calculi and hypertrophy of the prostate is more than casual; each is liable to induce or aggravate the other condition by pressure, obstruction, congestion, etc.

131. **Methyl-Alcohol Poisoning.**—Foerster reports some cases in which the symptoms suggested methyl-alcohol poisoning but were explained later by other factors, arteriosclerosis, etc. He states that out-of-door air, sweating and profuse diuresis aid in expelling the poison so that the dancers at a wedding suffered less from the ill effects of methyl-alcohol poisoning than the persons who sat still or were already drunk from other liquor. These experiences suggest the importance in treatment of sweat baths, copious drinking, diuretics, active exercise and deep breathing in well ventilated rooms, supplemented by copious saline infusion in the abdominal wall—which has an especial diuretic action—venesection and possibly transfusion. Not much can be hoped from these measures for elimination of the poison after the nerve centers are already seriously affected by it. On suspicion of methyl-alcohol poisoning, institutional care at once is imperative; putting the patient to bed in the home is dangerous. The interval is generally long enough before symptoms develop to permit successful treatment of the above kind, but it is extremely important to differentiate the poisoning from attacks due to arteriosclerosis; the measures required for the poisoning are directly injurious in case of arteriosclerosis.

138. **Non-Operative Treatment of Hemorrhoids.**—Kofmann greets Boas' method of artificially inducing extra-anal incarceration of hemorrhoids (described in THE JOURNAL March 9, p. 742), as a very promising improvement over operative measures. He states that he has been applying this principle systematically in treatment for some years, urging patients to refrain from restoring the nodules to the bowel, and has found this an efficient and convenient method of shriveling up the nodules, some of his patients having been thus freed from disturbances for many years up to fifteen. The only measures he applies are opiates to relieve the tenesmus and local dressings of aluminum acetate to relieve the pains which are considerable at first; after two days they become insignificant. He has observed many cases in which abrupt operative measures, depriving the patients at one stroke of this mode of relief for congestion in the portal region, were followed by apoplexy, vascular defects, etc., which he thinks had some connection with the sudden suspension of the hemorrhoidal hemorrhages. (See "Vacuum Suction Apparatus" in Queries and Minor Notes Department in THE JOURNAL, May 18, p. 1527.)

St. Petersburg medizinische Zeitschrift

April 14, XXXVII, No. 7, pp. 99-118

139 Electric Skin-Reflex Stimulation of Salivary Glands in Dogs. (Starke faradische Hautreizung als bedingter Erreger der Speicheldrüsenarbeit bei Hunden.) M. Jerofejewa.
140 Neurorecurrences After Salvarsan in Syphilis. (Ueber "Neurorecidive" nach Salvarsan.) E. Schwarz.
141 Pathology of Metabolism of Nuclein. (Die Pathologie des Nukleinstoffwechsels—Gicht, Uratsteindiathese.) R. Schütz.

Wiener klinische Wochenschrift, Vienna

April 25, XXV, No. 17, pp. 615-650

142 Behavior of Sarcoma Cells in Respect to Animal and Human Serum. V. (Verhalten tierischen Sarkomzellen gegenüber tierischem und menschlichem Serum.) R. Kraus and K. Ishiwara.
143 *Cystic Degeneration of the Ovaries as Cause of Genital Hemorrhage. (Kleinzystische Degeneration der Ovarien als wahrscheinliche Ursache unstillbarer Genitalblutungen.) A. Pölzl.
144 *Differential Diagnosis of Pain in the Leg. (Differentialdiagnose der Schmerzen im Bein.) S. Erben.
145 The Plague at Vienna in 1679. (Pestjustiz.) J. Fischer.

143. **Cystic Degeneration of the Ovaries as Cause of Uterine Hemorrhage.**—Pölzl reports four cases in young women, nulliparæ and free from any history of inflammatory disease of the genitals and of constitutional taint, except possibly acquired syphilis and an infantile uterus in one case. In each case severe hemorrhage occurred early, in some with the first menstruation, and the pathologic hemorrhages returned at irregular intervals, menstruation being weak or absent in the interim. The hemorrhages came on without the premonitory symptoms of menstruation, and the regeneration of the blood did not proceed as after ordinary hemorrhages. In each case both ovaries were found in cystic degeneration. A cure is possible in such cases only by removal of both ovaries. In the one case in which this was done, no symptoms from lack of ovarian functioning followed, and the patient recuperated to a remarkable extent, the general health being very much improved.

144. **Differentiation of Pains in the Leg.**—Erben discusses the signs and symptoms of affections that may involve the leg and urges that physicians should not be too ready with the diagnosis of sciatica. The influence of abdominal straining should be investigated; when on coughing there is a twinge of pain along the course of the sciatic nerve, its root probably is irritated. Pains in the leg which are the consequences of processes in the pelvis are generally aggravated by abdominal straining, which is not the case with spinal affections, coxitis and neurasthenic or hysteric pains, flat-foot, etc. The knee is generally cooler with sciatica, and the sensitiveness of the sciatic nerve at any attempt at stretching is revealed by the Lasègue, Feuerstein and Bonnet signs. Tapping the bone causes more pain with rheumatic and gouty affections than with sciatica. The pains in the leg with osteomalacia generally are preceded by pains in the sacral region and back, and the muscles and nerves are not so tender on pressure as the bones themselves. If paresis accompanies the pains in the legs, this speaks against sciatica. Circumscribed syphilitic periostitis seldom has the pain localized as with sciatica, while it is generally most severe at night and the tibia is usually the site. Tabetic pains seldom run along a straight line.

Zeitschrift für Urologie, Berlin

April, VI, No. 4, pp. 257-336

146 *Paraffin as Vehicle for Continuous Medication of Male Urethra. (Eine Dauerinjektion für die männliche Harnröhre.) P. Asch.
147 Elimination of Salt in the Kidneys Under Theocin. (Die Kochsalzausscheidung der Nieren mit bes. Bezug auf das Theocin natrium aceticum.) J. Sellei.
148 Massage Rinsing of Anterior Urethra. (Instrument zur Behandlung der vorderen Harnröhre mit Spülmassage.) E. Wossidlo.
149 Granular Concrements in Prostatic Secretion. (Befund massenhafter Körnchenkugeln im Prostatasekret.) R. Goldberg.
150 *Constantly Negative Roentgenoscopy with Pure Uric-Acid Calculi. (Notiz zur Röntgendiagnose der Harnsteine.) A. Seelig.

146. **Paraffin for Treatment of Urethritis.**—Asch uses a paraffin mixture which liquefies at 104 F., and injects 5 or 10 c.c. through a warmed syringe into the urethra and closes the outlet with the fingers for five minutes. By the end of this time the paraffin has hardened sufficiently so that it will not run out, while it distends the walls of the urethra and exerts a soothing action on the tissues and can be left undisturbed for twelve hours. He injects beforehand a little local anesthetic to prevent muscular contraction as the paraffin is injected. The patient drinks as little as possible just before and during the application of the paraffin; the best time for the procedure is late in the afternoon so he can keep quiet afterward. The bowels should be well emptied also beforehand. A few drops of ichthyol or other disinfectant might be added to the paraffin, but as a rule Asch prefers merely a mixture of several paraffins with various melting points so that the mass keeps at the consistency of a salve at body temperature. This is the mixture used by Lipowski to prevent absorption in the intestines in treatment of chronic constipation. It acts in the urethra by smoothing out the folds in the mucous lining and thus permitting the parts to heal, Asch explains.

150. **Roentgenoscopy of Uric-Acid Calculi.**—Seelig's experience confirms Telemann's statements in regard to the totally negative findings on roentgenoscopy of urinary calculi when they consist of uric-acid alone. In four cases reported, the cystoscope showed from four to forty stones in the bladder and they were easily removed by crushing and rinsing out,

V. 58 1912

but the roentgenoscopic findings had been constantly negative, and chemical examination showed that they were pure uric-acid calculi. He thinks it very probable that such stones in the kidney have often escaped detection. They can be rendered visible by supplying artificially some medium, such as oxygen, which modifies the conditions for absorption of the Roentgen rays. For the bladder this is readily feasible and relatively free from danger, but whether this can be said of filling the kidney pelvis with oxygen is open to question.

Zentralblatt für Chirurgie, Leipsic

April 20, XXXIX, No. 16, pp. 529-568

151 Technic for Incision in Cholelithiasis. (Ueber die Schnittführung bei Operationen an den Gallenwegen.) F. König.
152 Wedge Excision of Body of Uterus to Correct Prolapse. (Die "Filigelung" des Uterus als Radikaloperation des Vorfalls.) H. Hans.

Zentralblatt für Gynäkologie, Leipsic

April 20, XXXVII, No. 16, pp. 489-528

153 *Importance of Psychoneurotic Symptoms for Gynecology. (Psychoneurotische Symptome ausserhalb der Genitalsphäre.) M. Walthard. (Psychoneurotische Genitalsymptome.) M. Walthard.
154 Attempted Criminal Abortion in Absence of Pregnancy. (Tentamen abortus provocandi deficiente graviditate.) W. Sigwart.
155 *Perforation of the Uterus. (Zur Kasuistik der Uterusperforationen.) J. Halban.
156 Deposits of Glycogen in Human Placenta. K. Fiesch.
157 *Improved Radical Operation for Cancer of Vagina. (Ein auf perinealem Wege mit der Entfernung en bloc des ganzen Genitalapparates und Rektums erfolgreich operierter Fall von Scheidenkrebs.) A. Paunz.

April 27, No. 17, pp. 529-560

158 Action of Roentgen Rays on Anatomic Structure of Human Uterus and Ovaries. R. Meyer.
159 *Early Symptom of Extra-Uterine Pregnancy. (Frühsymptom der Extra-uterin-Gravidität.) G. Bertolini.

153. **Psychoneurotic Symptoms from Gynecologic Standpoint.**—Walthard's research has demonstrated to his satisfaction that psychoneuroses in connection with menstruation, pregnancy and the puerperium are liable to occur regardless of whether the genital organs are sound or diseased. He has examined the records of the neurologists Dubois and Schnyder at Berne and found that among their patients exhibiting all kinds of psychoneurotic disturbances, the genital organs were normal in all but 10 per cent. In his own practice he found among sixty-five patients complaining of abdominal pain, but with normal urogenital and digestive organs, that 49 per cent. had hot flashes; 50 per cent. abnormal chilliness; 61 per cent. "palpitations;" 50 per cent. dizziness; 64 per cent. morbid dread; 58 per cent. insomnia; 52 per cent. sudden sweating, and 58 per cent. depression—all these regardless of the patient's age. A nervous cough, pruritus and other functional disturbances were frequent—all showing, he declares, that the above symptoms which are generally ascribed to the artificial or natural menopause have nothing directly to do with the genital organs and hence are not a necessary consequence of the loss of genital functioning. The trouble is an overexcitable nervous system, and patients in this category should never be submitted to any gynecologic operation unless it is urgently necessary. Harmless gynecologic affections should be corrected exclusively by medical measures. This will reduce to the minimum the number of women complaining of reduced earning capacity from psychoneurotic symptoms following an anatomically successful gynecologic operation. He discusses further the localization of psychoneurotic symptoms in sound genital organs, expatiating on the importance of recognizing their functional character and hence of abstaining from any gynecologic local measures. He keeps the patient in bed to build up the fatigued body and strengthens it with active movements. With these simple general means it is possible to cure without any local measures psychoneurotic genital symptoms, such as chronic spasm of the musculature of the pelvic outlet causing vaginismus, spasm of the anus or bladder, and of the oblique or rectus muscles, algias and hyperesthesias, as also hypersecretion and many spasms and atony of the involuntary muscles. Patients with these symptoms are liable to go from one doctor to another, taking one method of treatment after another, and have operation after operation done, all without relief, and finally they may end in an insane asylum or in suicide. In his experience fully 5 per cent. of all applicants in the gynecologic clinic belong to this category, applying for relief from psychoneurotic genital symptoms, and in private practice the proportion is much larger. It is thus imperative for gynecologists to practice psychotherapy. The number of operations and local courses of treatment will be much reduced, but the number of women cured will be far larger.

155. **Perforation of the Uterus.**—Halban declares on the basis of his experience in seven cases that when the perforation was the work of an instrument like a forceps, a laparotomy is necessary, as one never knows how much harm has been done in the abdominal cavity. In two of his cases the operator had no suspicion that the intestine had been seized and injured by his instrument. All the patients recovered in the five cases in which the laparotomy followed soon after the perforation. The intestine is more apt to slide out of the way when the perforation was done with a pointed instrument or a curet, so that conservative treatment here is justified under close supervision to detect the first signs of internal hemorrhage or peritonitis. This was the principle followed in one case until fever and pain the fourth hour called for immediate abdominal hysterectomy. In two of his cases, on the other hand, the intestine was not injured, and yet fatal peritonitis developed notwithstanding the good prognosis at first. Such experiences as this incline one to a more radical management of the cases in dubious conditions. He thinks that probably both of these patients might have been saved if the uterus had been removed at once on discovery of the perforation. Hysterectomy is indicated the more urgently if there is any doubt as to the asepsis of the preceding operation.

157. **Vaginal Cancer.**—Paunz reports the successful removal of a cancer in the vagina by taking out in a single mass the entire genital apparatus and rectum, the patient being dismissed in good condition after four weeks with merely a linear scar running from the urethra to the new anus in the sacral region. She was a xi-para of 51, with a suspicious vaginal discharge for four or five months. The operation was done under spinal anesthesia and the patient was allowed to get up the next day. The bowels were kept from moving for eight days. Paunz has found two similar cases on record but the technic was more complicated and primary healing was out of the question, while his removal of the whole mass in one piece, through the perineum, was an aseptic operation with loss of scarcely any blood, and there was no possibility of infection from the vagina or rectum.

159. **Early Sign of Extra-Uterine Pregnancy.**—Bertolini says that he has frequently had his attention called in the clinic to the sign described by Solowij (mentioned in these columns March 9, 1912, p. 744). He explains the doughy resistance developing in the pouch of Douglas as the result of small accumulations of blood, hence its early diagnostic importance. In one of the three typical cases which he reports, acetonuria came on with the resistance in the pouch of Douglas; it was not present before. There seems to be some causal connection between the hemorrhage and the acetonuria.

Zentralblatt für innere Medizin, Leipsic

April 20, XXXIII, No. 16, pp. 385-396

160 *Acute Dilatation of the Stomach. (Zur Klinik der akuten Magenerweiterung.) Urrutia.

April 27, No. 17, pp. 397-420

161 Polycythemia. (Zur Kenntnis der Vaquez-Osler'schen Erkrankung.) R. v. Jaksch.

160. **Acute Dilatation of the Stomach.**—Urrutia reports three cases encountered in 1911; the diagnosis was made correctly at once and two of the patients recovered. In the sixty similar cases on record the diagnosis had been correct in only thirteen. The clinical picture includes enormous distention of the stomach, profuse vomiting in most cases, although one of his three patients did not vomit, great thirst, clammy sweat; the pulse is soft and depressible, accelerated and sometimes irregular, while there is little if any fever, or there may be subnormal temperature. The condition generally suggests ileus but one of his patients passed flatus from the first day. The abdomen is usually distended, without peristaltic move-

ments, although one of his patients developed after a few days symptoms of partial stenosis with splashing sounds and peristaltic waves in the duodenum. In his cases systematically repeated lavage of the stomach and nothing allowed by the mouth, not even a drop of water, restored two of the patients, but the other, a boy of 12, died the eighth day after a plastic operation on the pylorus which had been followed by acute dilatation, refractory to all measures. The dilatation in the first case came on the day after the patient, a robust man of 52, had taken a purgative for some slight stomach derangement. The two others were postoperative cases and both had old stenosis of the pylorus with hypertrophy of the stomach musculature. In one the stomach walls became temporarily paralyzed, but there was no evidence of paralysis in the other, the stomach musculature and duodenum evidently working strenuously to overcome the partial arteriomesenteric obstruction. No benefit was derived from change to the ventral decubitus or side, or from a gastro-enterostomy. In the two other cases daily lavage and rinsing out of the stomach cured without necessity for other measures. There was no indication of air having been swallowed in his cases, which Mathieu regards as a causal factor.

Gazzetta degli Ospedali e delle Cliniche, Milan

April 18, XXXIII, No. 47, pp. 489-496

162 Incarcerated Hernia of the Bladder. (Cistocele crurale extraperitoneale strozzato.) G. Giovannetti.

April 21, No. 48, pp. 497-512

163 General Anesthesia. (La narcosi.) F. Bottazzi.
164 Organotherapy of Nervous Disease. (Contributo casistico alla organoterapia delle nevrosi mediante un preparato non contenente principii albuminoidei.) C. Fontana.

April 28, No. 49, pp. 513-520

165 Pain in Appendix Region During Acute Infectious Diseases. (Dolori appendicolari nel decorso di malattie infettive acute.) J. Illuminati.

Riforma Medica, Naples

April 20, XXVIII, No. 16, pp. 421-448

166 Experimental Vascular Connection Between the Ovaries. (Sulla produzione di connessioni vasali fra ovaio ed ovaio.) R. Lettieri.
167 Patent Duct of Botalli. (Sopra un caso di "morbo azzurro" da probabile persistenza del dotto arterioso di Botalli.) A. D. Piane.

Brazil-Medico, Rio de Janeiro

April 8, XXVI, No. 14, pp. 133-142

168 Treatment of Acute Articular Rheumatism by Salicylic Ions. (Estudo clinico-experimental sobre o tratamento do rheumatismo articular agudo pela ionisacho salicylica.) J. C. F. Pires. Commenced in No. 13.

Semana Medica, Buenos Aires

March 28, XIX, No. 13, pp. 605-648

169 Salvarsan in Syphilis. (La avariosis y el 606.) A. A. Alsina.
170 Signs of Organic Hemiplegia. (Los signos nuevos de la hemiplegia organica.) P. B. Aquino.
171 Synthetic Biology. (Los recientes progresos de la plasmogenia—La biologia sintetica y las germinaciones de los alcaloides y de los colores de anilina. La vida y los crecimientos osmoticos.) V. Delfino.

Hospitalstidende, Copenhagen

April 12, LV, No. 15, pp. 421-444

172 Preventive Silver Nitrate Treatment of Umbilical Cord. (Om prøventiv Lapisbehandling af Navlesnorsstumpen og Navlesaaret hos nyfødte.) F. Teilmann.

April 17, No. 16, pp. 445-468

173 The Pirquet Tuberculin Skin Reaction. (Undersøgelser over Pirquets Reaktion.) H. Petersen. Commenced in No. 15.

April 24, No. 17, pp. 469-492

174 Normal Position of the Stomach. (Nogle Betragtninger over Ventriklens Leje.) O. Chievitz.
175 Modified Technic for Wassermann Reaction. (Om den Hermann-Perutzke Syfilisreaktion.) S. A. Gammeltoft.

Norsk Magazin for Lægevidenskaben, Christiania

May, LXXIII, No. 5, pp. 617-808

176 *Eosinophilia as Result of Presence of Animal, Never Vegetable, Parasites. (Aarsaken til Eosinofili.) B. Ebbell.
177 *Relics of Inflammation in Vicinity, Explanation of Assumed "Chronic Appendicitis." (Om kroniak peritonit reapektive pericolit og deres forhold til den "kroniske appendicit.") J. Roll.
178 *Sodium Bicarbonate in Diabetes. (Om nogen virkninger av store doser bicarb. natr. ved diabetes mellitus.) O. Hanssen.
179 Temperature and Respiratory Crises in Case of Tabes. (Temperaturkriser og respirationskriser ved tabes dorsalis.) W. Holland.
180 Fatal Hemorrhage. (Om forbløding.) L. S. Petersen.

176. **Causes of Eosinophilia.**—Ebbell reports extensive research on various acute and chronic infections, the findings apparently indicating the law that vegetable parasites have no influence on the eosinophils except possibly a destructive action on them in common with other leukocytes. On the other hand, animal parasites seem to have an invariable eosinophil-producing and attracting action. This law applies also to different substances derived from the animal kingdom, serums, organ extracts, absorbed hemorrhagic effusions and certain drugs. Substances of vegetable origin have none of this attracting action on the eosinophils. He found that scarlet fever, asthma, chorea, acute articular rheumatism, leukemia and pseudoleukemia seem to be accompanied by eosinophilia, and he thinks that this can be accepted as proof that animal parasites are involved in their etiology. The deduction follows that drugs known to act on animal parasites should be given in treatment. He suggests from this theoretical standpoint that salvarsan is indicated in scarlet fever. It is only in the diseases of animal-parasite origin, he remarks, that we have true specifics, like the salicylates in articular rheumatism, arsenic in chorea and multiple sarcomatósis and quinin in malaria. Not a single specific of the kind has yet been found for any bacterial disease; the latter are traceable to the vegetable kingdom, and substances belonging to this kingdom seem to have no attraction for the eosinophils. The local eosinophilia after a bacterial process has run its course he ascribes to local destruction of blood-corpuscles.

177. **"Chronic Appendicitis."**—Roll gives the details of eleven cases in which the symptoms were those commonly explained as due to chronic appendicitis, but the trouble proved to be relics of inflammation of the tissues in the vicinity with adhesions at different points. The adhesions may form sheets attached to the cecum and appendix, or in the neighborhood of the hepatocolic ligament, spreading thence in various directions. He is convinced that these adhesions may develop from mechanical causes alone, when the ascending colon is unusually short. The peristaltic movements drag on the short colon until the weakest attachment yields, with resulting downward displacement of the parts. With stout muscular walls the intestine may be held in place for a time, but if the abdominal wall grows flabby or the muscles relax from fatigue, the intestine, suspended by its adhesions, drags on the peritoneum, entailing symptoms interpreted variously as nervous dyspepsia or neurasthenia; the bowel functions become irregular, and when the feces are passing the points of internal derangement, nausea, colic or other pain may be felt, possibly incapacitating the patient although the anatomic lesions are in reality minimal. A moveable kidney may aggravate the condition. Bed rest and small frequent meals will relieve conditions, but disturbances recur when the patient returns to work. This is an aid in differential diagnosis; an actual cure is generally possible from operative measures alone.

178. **Sodium Bicarbonate in Diabetes.**—Hanssen gives the details of six cases, supplementary to two he has previously published, with special research on the weight, albuminuria and coma in diabetics given large doses of sodium bicarbonate. Three of the six patients had convulsions follow the injection. One patient was a man of 27 and the coma subsided under the influence of the alkaline solution given by the mouth and by intravenous injection. It returned again two months later and no influence was apparent at this time, the patient succumbing from arrest of the respiration immediately after the infusion. In all the other cases death occurred immediately, or four and ten hours later. Hanssen adds that his material warns that large doses of sodium bicarbonate are not free from danger. He gave in one case 64 gm. of sodium bicarbonate in 1.6 liters of water and 90 gm. by the mouth. One woman took 240 gm. by the mouth in ten doses at half-hour intervals, with 10.6 liters of water. Another patient was given by intravenous injection 39 gm. of sodium bicarbonate in 1.3 liters of water and later 60 gm. in 1.5 liters.

JOURNAL Announcements, Knocks and Boosts, Books Received and changes in the Public Service will be found in the advertising section, commencing on the second page following reading matter.

V. 58
1912